

# MANUFACTURERS RECORD

A Weekly Newspaper Devoted to the Industrial, Financial, Railroad,  
Mining, Contracting, Engineering, Building, and General  
Business Interests of the South and Southwest

Vol. 68  
No. 5

ESTABLISHED 1882

\$4.00 Per Year  
Single Copy 15 Cents

Pronounced Activity in Iron and Steel Industries in the Birmingham District.

Typical Illustrations of What Southern Men Are Achieving.

Wild Agitation and Excessive Cotton Production, Not the War, Hurting the South.

Cotton, at the Cost of Character, Too Large a Price to Pay.

BALTIMORE, AUGUST 5, 1915



## First Aids to the Boiler Room

### CLINCHFIELD FUEL COMPANY

SPARTANBURG, SOUTH CAROLINA

## UNION SULPHUR CO.

MAIN OFFICE

Whitehall Building

NEW YORK, U. S. A.

Own and Operate in Calcasieu Parish,  
Louisiana

**The Largest Sulphur Mine  
in the World**

**Absolutely Free from Arsenic or Selenium**

The markets of the world are supplied through the port of Sabine Pass, Texas, and the Company has large storage facilities at Baltimore, Philadelphia, New York, Boston, Portland and Three Rivers, Canada, from which the trade can be supplied in carload lots, as required.

**Producers of the Highest Grade Brimstone  
on the Market**

## Eureka Linen Fire Hose



### Good Hose Is Like Good Ammunition

It allows you to protect yourself to the best of your ability.

Many a building and stock has been saved through the foresight of its owners who took the trouble to select proper hose and by the same token many a disastrous fire has been made disastrous through the failure of hose at a critical time.

The average hose laid on racks for years without any other care fails when needed.

The causes for this are mildew and decay. Eureka Linen Hose is proof against mildew and rot. Is woven in a circular form and lined with the finest para rubber.

Time and "racking" will not affect its usefulness.

Send for our catalogue and you will see a number of varieties, but all are of superior quality

**EUREKA FIRE HOSE MFG. CO.**

27-29 Barclay St., New York





e

on

o.

Vol. L

MAN  
RICHARD  
FRANK  
R

NEW YORK  
BOSTON

Subscrip  
Sta  
Ph  
in

[Entere

In ord  
news of  
to the M  
individu

THE  
lan  
Montgo  
the cott

The Ho  
this imp  
been fur  
cotton e  
tion of t  
superflu  
in so say  
In posses  
be truste  
the Amer  
distinctly

The "a  
is plainly  
upon the  
otic and  
inconside  
the ship  
a free an  
scheme is  
agitation  
worse tha  
movement  
which is

The par  
tale of w  
Congressn  
working  
weeks of  
they soug  
able bank  
that oute  
done-man  
is hoped t  
six-cent c  
order on t  
a retaliate

W

From t  
bassador

Judging  
of Mr. H  
must have

611 Cuya

Owners an

Editor Ma

Please re

Newport in

Association

This is v

very much

South is th

only be up

of the unie

You are

when we c



# MANUFACTURERS RECORD

A WEEKLY SOUTHERN INDUSTRIAL, RAILROAD AND FINANCIAL NEWSPAPER

Trade-Name Registered in the U. S. Patent Office

Vol. LXVIII. No. 5.  
WEEKLY.

BALTIMORE, AUGUST 5, 1915.

\$4.00 A YEAR.  
SINGLE COPIES, 15 CENTS.

PUBLISHED EVERY THURSDAY BY THE  
MANUFACTURERS RECORD PUBLISHING CO.

RICHARD H. EDMONDS, Pres. VICTOR H. POWER, Treas.  
FRANK GOULD, Vice-Pres. I. S. FIELD, Sec'y.

RICHARD L. EDMONDS, Editor and General Manager

## BRANCH OFFICES:

NEW YORK, 52 Broadway CHICAGO, 1409 Fisher Bldg.  
BOSTON, 733 Old South Bldg. ST. LOUIS, 608 Century Building

Subscription \$4 a year (payable in advance) to United States, Mexico, Cuba, Porto Rico, Hawaii and the Philippines. To Foreign Countries (including Canada) in the Postal Union, \$6.50 a year.

[Entered at the Baltimore Postoffice as second-class matter.]

In order to avoid delays, all correspondence pertaining to news or advertising matters should be addressed directly to the MANUFACTURERS RECORD, Baltimore, Md., and not to individual editors, officers, employees or any branch office.

## COTTON STAMPEDERS.

THE Vicksburg Herald, commenting on a circular sent out by the Chamber of Commerce of Montgomery to force the administration's hand in the cotton controversy with Great Britain, says:

The Herald has already given expression of "its views in this important matter," and papers containing same have been furnished the Montgomery "boat rockers." For the cotton exchanges to pass resolutions simply for information of the President upon the cotton condition might be superfluous, but would be no more than proper, though in so saying the Herald has all faith that Mr. Wilson is in possession already of facts of the "condition," and may be trusted to do all in his power for redress of any wrongs the American cotton interests are undergoing, as he has distinctly promised.

The "scheme," however, as we see it, aims further. It is plainly intended in it to bring the pressure of a clamor upon the President in the matter, which is both unpatriotic and mischievous. The course designed is exceedingly inconsiderate of Mr. Wilson. Engaged as he is in piloting the ship of state through troubled waters, he is entitled to a free and an unhampered hand, though the worst of the scheme is the effort to stampede cotton growers; to base agitation upon a scare-crow picture of "business conditions worse than last year." What the Herald thinks of such a movement was expressed in its issue of the 15th inst., which is quoted:

The panicky prediction we quote differs little from the tale of woe that was sung by a certain lot of Southern Congressmen—including the force of Senators who are working up the present boat-rocking plot—in the early weeks of last fall. By crying up a six-cent cotton calamity they sought to stampede Congress into averting "inevitable bankruptcy" by doing financial foolishness. While that outcry of ruin failed of verification, much harm was done—many were scared into sacrificing their cotton. It is hoped that the remembrance of the losses caused by the six-cent cotton panic last year will place an effective stop order on this scheme for clamoring the administration into a retaliatory trade war with Great Britain.

## WORDS OF COMMENDATION.

From the office of Hon. Myron T. Herrick, late Ambassador to France:

Judging from the number of letters received in comment of Mr. Herrick's address, the MANUFACTURERS RECORD must have an extended circulation among careful readers.  
R. INGALLS.

611 Cuyahoga Building,  
Cleveland, O.

ARKANSAS LIGHT & POWER CO.,  
Owners and Operators Light, Water and Power Properties,  
Arkadelphia, Ark., July 21, 1915.

Editor Manufacturers Record:

Please refer to your favor of July 17 addressed to me at Newport in connection with the White River Development Association.

This is very interesting data, and I want to thank you very much for the same. This only goes to show that the South is the greatest country in the world, and if we will only be up and doing, some day it will be the garden spot of the universe.

You are doing a great work; continue it. Call on us when we can be of any assistance down this way.

ARKANSAS LIGHT & POWER CO.,  
H. C. COUCH, President.

## WHAT SHALL IT PROFIT THE SOUTH IF IT GAIN THE WHOLE WORLD (FOR ITS COTTON) AND LOSE ITS OWN SOUL.

"COTTON at the cost of character is too large a price to pay" is the closing sentence of a sermon by Rev. Dr. M. Ashby Jones of Augusta, Ga., which should be read by every man in the South. Discussing the relative value of a man and property, where Christianity always raises the issue of values and insists as its fundamental teaching that a man is worth more than property, Dr. Jones turned his discussion to the situation existing in the South today and the influence of cotton upon the life and character of this section, and said:

To translate this teaching into terms of our present pressing problem, we must ask, How much, then, is a man of more value than a bale of cotton?

Instantly religion becomes concrete, for cotton is the most forceful influence in forming our economic theories, people.

What a part it has played in our history! It made us a slave-holding people and determined for a century our social customs and standards. It absolutely denominates our industrial and commercial prosperity. It has been the most forceful influence in forming our economic theories, and has often dictated our political creeds. According to its price we are liberal or parsimonious, morose or cheerful. In playful eulogy of its immense value we have called cotton king, but in all seriousness we should ask ourselves the question if it does not actually rule in well-nigh every realm of our life.

Now, as we approach another harvest, the price of cotton stands like a mighty menace, threatening the intellectual and moral integrity of our people. Great world questions which challenge the cleanest and clearest thinking and call for the highest and holiest moral convictions front the characters of men, and already it is distinctly suggested that our attitude on these questions shall be determined by the price of cotton. We must answer, whether we shall merge our characters into cotton and auction them in the markets of the world.

I look back to last autumn with shame and humiliation. It is a picture of the South hawking her impotence upon every avenue of commerce, advertising her weakness, and like blind beggars pleading their poverty with the plaint, "Buy a bale," lest we starve. Was this the South which rose phoenix-like from the ashes of the Civil War with a resilient resourcefulness which astonished the world and rebuilt this miracle of a new South? Have we forgotten all our principles of democracy, with its familiar protests against paternalism, that we so quickly creep to the national treasury crying for charity? Is cotton of so great a value that for it we will sacrifice our manhood, our independence and our moral poise? I am profoundly convinced that the price of cotton is a fundamental moral question, and by it God is testing the souls of our people.

This year the issue is still more acute and significant. England has declared a "long-distance blockade" of cotton. In this blockade she threatens no property, and holds sacred and inviolable the lives of those who sail the seas, no matter what may be their nationality. It is a debatable question whether, under international law, she has this right. But let us grant that she is wrong, as I believe she is—what is the result? She helps to lower the price of cotton. In retaliation Germany announced her submarine blockade, threatening not simply the property, but the life of every American who dared to travel the ocean highway. In carrying out that threat she has deliberately murdered men, women and children. When our Government protested, she not only refuses to repudiate this inhuman act of her navy, but justifies the murder, and refuses to reverse her barbarous policy. A Savannah dispatch to a New York paper a few days ago says: "The South is far more interested in the English blockade of her cotton than she is in the controversy over the German submarine warfare." I believe this to be a slander upon my people. Has the price of cotton so paralyzed our moral sensibilities and destroyed our moral perspective that we believe a cotton bale to be more valuable than a babe—that a commercial advantage is more important than the maintenance of human rights?

It is not only our right, but our duty, at the proper time, and in the proper manner, to take up the question with England of her cotton blockade and to insist upon whatever are our commercial rights? But at this supreme moment, when our Government is striving to maintain the standard of civilization and preserve the sacred rights of unarmed men and helpless women and children, for politicians, newspapers and trades bodies to seek to deflect

attention to the price of cotton is to reverse all the moral judgments of our Christian civilization and to raise again the question, "How much, then, is a man of more value than a sheep?"

The cry is going up that the South is being made to suffer for a fight which is none of hers. But we had better clearly understand that this fight is ours, and upon its issue our destiny is deeply involved with the rest of the world. Let us face now rather than be bitterly taught in the future what a German victory will mean. We can only judge what German triumph will mean by understanding what German warfare is.

The time has come when the facts so clearly stated by Dr. Jones must be studied by the people of the whole South. The South is in danger of worshipping cotton instead of worshipping the Almighty; we are in danger of sacrificing honor, integrity of character and all that makes for human advancement for the price of a bale of cotton.

Around the neck of the South hangs like a curse a bale of cotton.

We have idealized cotton; we have thought in terms of cotton; we have worshiped cotton, until some of us have backbones made of cotton strings and brains of cotton bolls, the one as weak as the other is flabby.

Cotton, which, rightly handled, would prove to be one of the greatest blessings that the Almighty ever gave to any country on earth, has many times in the past proven a curse to us. It was cotton that fixed the chains of slavery around the South, and it is cotton today that enslaves the thought and the heart of many of the people of the South. Cotton as king is a diabolical ruler, whereas cotton as a subject, held in check, would prove one of Heaven's richest blessings.

Let not the South lose its soul in exchange for a bale of cotton.

In line with the statements made by Dr. Jones is an editorial in the Savannah Press, in which, referring to this cotton agitation, it makes against those guilty of it a fearful arraignment expressed in the sentence:

It places this section in the position of blindness to the moral difference between human blood and the price of cotton.

This is a charge against these agitators, by one of the leading daily papers of the South, withering in its expression of their inability to measure the moral difference between human blood and the price of cotton.

## THE SOUTH'S GREAT MOUNTAIN PARK SHOULD BE DEVELOPED.

TO more widely acquaint the American people with the unequalled charms of the Southern Appalachian Mountains as a resort for health and pleasure seekers is the object for which the Appalachian Park Association was formed. To successfully encourage the adequate growth of tourist travel to the section it is declared by the association that further areas of lands must be added to the National Appalachian Park, and the co-operation of the public is asked in an effort to have Congress act favorably on the recommendation of the National Forest Reservation Commission that \$2,000,000 a year be spent for five years for additional purchases of lands by the Government under the Weeks law.

Larger contiguous areas of land are declared to be necessary to the development of the park along practical, economical lines. Good roads are of prime necessity in promoting tourist business in the mountains, and it is declared that anything like a con-

necting system of roads through the national Appalachian forests is impossible at the present time.

Secretary Lane is quoted as estimating that \$100,000,000 of tourist money ordinarily spent by Americans in Europe during a year will be held in America this year. "If the Southern Appalachian Mountains were made as accessible by good roads as the mountains of Switzerland, or even as some of the national parks of the West," Secretary Powell of the Appalachian Park Association says, "the tourist business would bring more clear profit to the six States bordering on these mountains, namely, Virginia, Tennessee, Alabama, Georgia, South Carolina and North Carolina, than probably any crops produced in these States, excepting cotton and corn."

The tourist business of New England has long been the great money crop of that section. With equal advantages in the way of transportation facilities, wayside inns, resort hotels and livable farmhouse accommodations, the Appalachian region should be as much more frequented, as its variety and quality of charm is greater than that of the New England mountain region.

#### TYPICAL ILLUSTRATIONS OF WHAT SOUTHERN MEN ARE ACHIEVING.

**T**HE force of character, ability to master every problem connected with engineering and other technical work and executive ability, which are inherent in thousands of young men in the South, find an apt illustration in two instances which have happened within the past 10 days. These cases, however, are but typical of many to be found in every part of the South and among Southern people living in every part of the country. They ought, however, to be an inspiration to other young men to develop all that is within them and prove themselves worthy sons of worthy sires.

Some seventeen or eighteen years ago a Virginia boy, Howard Bruce by name, about 19 or 20 years old, landed in New York looking for a job. As capital he had a good name and good character, more to be desired than great riches. The first job he secured was bossing a gang of negro laborers putting down gas pipe. As he found himself connected with gas making, he determined to know all about the industry, and spent his nights in the libraries studying everything connected with gas making. In a few years he was assistant superintendent in the construction of what is probably the largest gas plant in the world, which was then being built to enlarge the gas supply for New York City. When he was about 24 years old the superintendent of the plant, Mr. Alten Miller, resigned to accept a job at a very big salary to construct and reshape the whole gas plant of Baltimore. On Mr. Miller's resignation from the New York situation Mr. Bruce was made superintendent. Bartlett-Hayward Company of Baltimore, which is probably the largest builder of gas plants in the country, was furnishing the material for the New York gas works. Thrown in constant touch with Bruce, it made him a number of offers to come to Baltimore and take charge of its works and of its whole business. Not until the New York plant was finished and turned over completed did he accept this offer. Then he came to Baltimore as vice-president and general manager of Bartlett-Hayward Company at a large salary, with an interest in the concern. Last week, as vice-president and general manager of the company, he signed a contract for a European war order running as a minimum to more than \$12,000,000, and possibly considerably beyond that, which will result in enlarging the existing plant of Bartlett-Hayward Company and in building in connection therewith an entire new plant of great magnitude. Mr. Alten Miller, who was succeeded as superintendent of the New York gas works by Mr. Bruce, and who is widely known as a general consulting engineer, becomes consulting engineer in connection with the building of the new plant for Bartlett-Hayward Company, Mr. Frederick H. Wagner, whose recent articles on dyestuffs in the MANUFACTURERS RECORD attracted so much attention, being the chief engineer of that concern.

The largest shipbuilding plant in America, which now has under contract nearly \$25,000,000 worth of work, is that of the Newport News Shipbuilding &

Dry Dock Co., employing at present about 5500 hands. A few days ago a North Carolinian, Homer L. Ferguson, was elected president of that company to succeed the late A. L. Hopkins. Thus another Southern man becomes the head of one of the greatest industrial institutions in the country, once more emphasizing the strength of character in Southern young men whose ancestors were among the great constructive upbuilding leaders of the old South.

Mr. Ferguson was born in Heywood county, in Western North Carolina, March 6, 1873. His parents and grandparents were all born in North Carolina, and were all of Scotch, Irish and English stock. He graduated from the United States Naval Academy in 1892. After graduation he was three years in Glasgow, studying shipbuilding and engineering at Glasgow University. Returning to the United States in 1895, he was commissioned assistant naval constructor in the United States Navy.

His naval service included one year at Columbian Iron Works, Baltimore, Md.; two and one-half years at Wolff & Zwicker Iron Works, Portland, Ore.; one and one-half years at Puget Sound Navy-Yard, Bremerton, Washington; one year as superintending constructor at the Bath Iron Works, Bath, Maine; two years at Newport News as assistant to the superintending constructor, U. S. N.; one year at the Bureau of Construction and Repair, Navy Department.

February 1, 1905, he resigned from the navy to become the superintendent of hull construction at the Newport News Shipbuilding & Dry Dock Co., and was advanced from one position to another until he has now become president of this great enterprise.

One might go through the whole country, North, South and West, and everywhere find illustrations of what Southern men are doing as striking as these two which we have used of Bruce and Ferguson. For instance, when the United States Steel Corporation bought the plant of the Tennessee Coal, Iron & Railroad Co., they looked over their whole force to see who was best fitted for the biggest problem which the Steel Corporation then had. This problem was the rebuilding of and putting on a sound footing the properties of the Tennessee Coal, Iron & Railroad Co. The selection unanimously fell on George Gordon Crawford, a Georgian by birth, then about 36 or 37 years old, whose ancestors had been Georgians, who was the first graduate of the Georgia School of Technology, and who was then operating for the Steel Corporation one of its largest plants in Pennsylvania, employing over 10,000 men. Crawford's work in Alabama has demonstrated the wisdom of the selection made by the directors of the Steel Corporation.

In railroad operations, in finance and in industrial interests, as well as in the learned professions, Southern men are more and more coming to the front as among the greatest leaders of the country. Men of this kind are in business in the South and not in politics. They are doing the constructive upbuilding work which is bringing prosperity to this section, despite the work of unwise politicians, who, to a large extent, have been a hindrance rather than a help to the South. The South must be judged by men of this stamp and not by the small politician, nor by the pessimist, who always, when given the choice of two evils, gladly takes both.

The story of the men of the old South and their wonderful achievements in science, in engineering and in general business operations has never been fully told, but upon the canvas of the world's advancement their life-work is being portrayed by the achievements of their descendants.

#### MUNITIONS AND MORALITY.

**T**HE reproach to America for furnishing war material to our enemies is not fair. It is unjust. It was Germany herself who in The Hague discussion defeated the proposal to forbid the shipment of war material from neutral States to belligerents. There exists only an agreement prohibiting shipments by neutral Governments to belligerents. The American Government has furnished no war materials.—Editor Eugene Zimmerman in the Berliner Lokal-Anzeiger.

Succinct and to the point, and leaving to be added just one thought.

The sale of war munitions by individuals and corporations of neutral States is right not only legally and "neutrally," but morally. Its moral foundation is the principle that a non-military country must have access to neutral markets when its independence and its life are threatened by a nation founded upon "militarism" and, therefore, prepared for aggression.

The pre-eminent justice of this practice never has been better exemplified than in the present war. From this land that loves liberty has gone the ammunition which the gallant little Belgian army is defending the last corner of its beloved land against the ruthless invader that broke its pledged word in riding rough-shod over Belgium's neutrality, that swooped down upon the inoffending nation whose only desire was peace, and turned its mines and its factories to the manufacture of munitions for use against its own people.

Every American shell that goes to the Belgians or those who are aiding Belgium and France in their fight for liberty represents a contribution to the cause of righteousness. The furnishing by this country of war munitions to the Allies represents the highest type of morality.—New York Herald.

Amen and Amen.

#### "ONCE TO EVERY MAN AND NATION COMES THE MOMENT TO DECIDE."

**"YOU** will remember that Dante in the *Inferno* has a hell beneath all other hells, prepared for those timid beings who insisted on being neutral in the everlasting fight between good and evil. This war is a fight between those forces of good and evil."

This is an extract from a letter by Samuel Harden Church, president of the Carnegie Institute, Pittsburgh, to an intimate friend in a German university. The letter presents an illuminating discussion of the cause of the European war. Professor Church has clearly stated the case, drawing his facts from the official statements made by the Emperor of Germany and other German, Austrian and Russian officials. Every man of honest mind and heart who wants to know the cause of the war, which has produced such woe as the world never knew, should read it. This letter, written early last winter, has attracted such wide attention in this and other countries that it has been published in pamphlet form for general distribution.

The statement quoted from Professor Church's letter, that Dante found a hell beneath all other hells reserved for those who in the everlasting fight between good and evil prefer to be neutral for fear of some personal harm, ought to be remembered not only as to this war, but as to everything else which bears on right and wrong. In this case, as Professor Church says, this war is a fight between the forces of good and evil. It is a fight between the most unscrupulous, murderous war machine ever created, representing the Hohenzollerns and the Hapsburgs as standing for "the divine right of kings to rule," on the one hand, and the democracy of the world, on the other hand.

Every man who does not believe in the "divine right of kings to rule" and ruin, and who believes in democracy; every man who does not believe in the deliberate, premeditated murder of innocent women and children on the high seas, is of necessity on the side of the Allies.

Every man who believes in the "divine right of kings to rule" or ruin, who believes in the deliberate murder of innocent women and children on the high seas, and every man who upholds the unspeakable and indescribable atrocities that have wrecked and ruined Belgium, is on the side of Kaiser Wilhelm.

There is no other ground on which any man can stand, unless he prefers that form of neutrality for which the lowest of all hells is reserved.

In Lowell's "The Present Crisis," appropriate in name and appropriate in thought to the crisis of this hour, though written many years ago, is the following, which fits the situation:

Once to every man and nation comes the moment to decide  
In the strife of Truth with Falsehood, for the good or evil  
side;  
Some great cause, God's new Messiah offering each the  
bloom or blight,  
Parts the goats upon the left hand and the sheep upon  
the right;  
And the choice goes by forever 'twixt that darkness and  
that light.  
Truth forever on the scaffold, Wrong forever on the  
throne—  
Then to side with Truth is noble when we share her  
wretched crust,  
Ere her cause bring fame and profit, and 't is prosperous  
to be just;  
Then it is the brave man chooses, while the coward stands  
aside,  
Doubting in his abject spirit, till his Lord is crucified.



## PRAYING FOR DIVINE GUIDANCE.

Pascagoula, Miss., July 24, 1915.

Editor Manufacturers Record:

Will you kindly send me a copy of the MANUFACTURERS RECORD containing on the title page your prayer for the divine guidance of Woodrow Wilson? I wish to keep it for future use.

It is refreshing in this age to find an editor and journal which, while favoring things material, can yet have a thought for things spiritual.

The hour is dark, and one may fain ask in the words of the old hymn:

"Watchman, tell us of the night,  
What its signs of promise are?"

And to this I would answer in the words of Browning's poem:

"The year's at the spring,  
And day's at the dawn;  
The lark's on the wing;  
The snail's on the thorn;  
God's in His heaven—  
All's right with the world."

That's my faith, and it is founded upon long and arduous study of history, science and philosophy.

However the present war ends, "militarism" is doomed. There is only one course open to us—each and every one of us must be loyal to Woodrow Wilson.

CHAS. E. CHIDSEY.

Yes, loyal to the President, rejoicing that we have as our nation's head one who trusts in Almighty guidance and dares to do right though the heavens fall, and praying in season and out of season that all in authority may be Divinely guided and our country be saved from all the horrors of war, but praying above all else that we may be guided to do what is right, regardless of all consequences. In other words, pray that we may do the right and leave the consequences with God.

## HOW TO BE ENTHUSED.

Marietta, Ga., July 26, 1915.

Editor Manufacturers Record,  
Baltimore, Md.:

Gentlemen—Marietta is thoroughly enthused over your work in the South and for the Southern manufacturers.

Every representative business firm in this city is now a regular subscriber for the MANUFACTURERS RECORD. It is the valuable guide and assistance in all development work.

Yours very truly,

FRANK L. BOUD,  
Publicity Agent.

If "every representative business firm" in the South was a regular subscriber to the MANUFACTURERS RECORD, they would be as thoroughly enthused over its work for the South and for Southern development as are the subscribers in Marietta, who, according to Mr. Boud's statement, include "every representative business firm" in the city.

As wide as the circulation of the MANUFACTURERS RECORD is throughout the South, as enthused over its work as are the thousands who are now on its subscription books, there is still room for many who are not subscribers and who would be greatly benefited by a broad survey of the South and its resources and its opportunities to be found in every issue.

## ADVERTISING FLORIDA ORANGES.

ALONG with better organization and closer cooperation among the orange growers of Florida there is a proposition to more adequately advertise the Florida product than ever before. There is a growing appreciation of the advantage in establishing a high standard for Florida oranges in the markets of the country by better packing methods and the shipment of only the finer grades of the fruit, and on top of this movement is a plan to spend \$500,000 in advertising during the coming year. This is \$20,000 more than has ever been spent by the Florida Citrus Exchange in a previous year.

During 1914 the California Fruit Exchange spent \$100,000 in advertising, with the result that practically everybody in the country came to know about and yearn for the "sun-kissed oranges" which the advertisements described.

Not only Florida, but Louisiana and the whole coast country may study to excellent advantage the enterprising methods of the far-away California fruit growers and profit by their success in marketing an orange which as compared with Florida oranges is like dried sawdust compared with the most delicious dish that the greatest chef can produce.

## THE SOUTH SHOULD MAKE GREATER USE OF ITS OPPORTUNITIES.

"YANKEE ingenuity is experiencing a renaissance," said a correspondent from Hartford, Conn., in our last issue in speaking of industrial activities that have been spurred on by the war.

If a country with the thrift and ingenuity of New England can have a renaissance, if New England preparedness required a spur to meet new conditions, it is hardly to be wondered that the South finds it has a lot to do to put itself in a condition to handle big contracts.

And yet why shouldn't the South be nearing the point where it can meet an emergency of this or any other sort? Isn't the obligation to occupy a front rank in industrialism becoming more and more pressing day by day? Can we with anything like complacency long continue to see Southern industries lose opportunities for big business, as many of them are doing now, because of unpreparedness for filling orders of an unusual kind and size?

Eleven years ago the MANUFACTURERS RECORD sent a correspondent to New England to study industrial conditions there, with the idea that the story of New England's achievements ought to be an inspiration to the South. A most interesting series of articles followed, in which it was demonstrated that pure grit, thrift and ingenuity were responsible for an enormous, deep-rooted, industrial supremacy, and for individual and collective wealth unapproached in America and hardly surpassed by any country on the globe. All this in a region barren of natural resources, such as timber, minerals and fuel, with a cold, inhospitable climate and without fertility of soil.

The leadership of New England in textiles, machinery, fine tools and many other lines was traced to the unceasing energy, genius and thrift of the Yankee individual, the thrift manifesting itself in the fact that New England savings banks held one-tenth of all the savings bank deposits in the world, and that Massachusetts savings banks have about \$800,000,000 on deposit.

With New England grown so rich by manufacturing the products of other sections, what ought to be the future of the South, it was asked, where there is a combination of coal, iron, oil, timber, agricultural products, fertility of soil and favorable climate such as can be found nowhere else on earth?

It was a belief of the late Edward Atkinson, great statistician and friend of the South, that natural advantages are likely to be a detriment rather than a spur to development activities. Within limitations this may be true, for the man who lives where nature is bountiful and kind lacks the goad to ceaseless activities that is always behind one who has to hustle to keep from starving or freezing.

But there are such boundless opportunities for almost illimitable development in the wonderfully dowered South that if the South does its part men will turn more and more from the economic wastefulness of life in a frigid zone, and the sons of New England and the North will move into the South in increasing numbers and occupy the rich fields that fairly groan out their invitation to be tilled.

Great strides have been taken by men wholly of the South. But so much remains undone that the very needs of the world at this time will demand a tremendous speeding up by Southern people or an abdication in favor of those who can and will measure up to the requirements of the times. It will be a case of "the tools to him that can use them."

## "TOO MUCH COTTON PLANTED."

WITH the Columbia Record we can agree in part when that paper, under the heading of "Too Much Cotton Planted," says: "The farmer is in part to blame for his own condition. He has planted too much cotton. He assumes great airs and thinks he has done wonders because he has reduced his acreage from 20 to 30 per cent."

With the sentiment we can agree, but not with the statement as to the reduction in acreage, for

instead of it being from 20 to 30 per cent., the decrease is less than 16 per cent.

Never for a moment last fall and winter did the MANUFACTURERS RECORD fail to point out that the situation of the Southern cotton grower would be worse this year than last unless there was a big reduction in acreage. We emphasized this with all the power at our command, and urged the business people, the bankers, the merchants and the landowners of the South join in refusing any aid to farmers unless they would agree to raise their own foodstuffs first and make cotton a surplus crop only.

Unfortunate as it may be, the cotton grower must pay the penalty for his gambling with chance, hoping that the war would be over or that his neighbor would reduce the acreage. But with all possible sympathy for the cotton grower, whose blunder has caused his troubles, we are not willing to see the whole South posed as a land of pessimism, lacking backbone and strength, and made to stand before the world as a suppliant asking alms.

## RAILROADS HERE AND ELSEWHERE.

MORE than 37 per cent. of the world's total of railroad tracks is in the United States, the aggregate being over 684,000 miles, of which this country has about 254,700 miles, these figures being up to the end of the year 1913, as compiled by the Royal Prussian Department of Public Works and recently published here by the Bureau of Railway News and Statistics at Chicago. As last year's construction in the United States was only about 1500 miles, the total here is now approximately 256,000 miles, this including 650 miles of line in Alaska.

For some years Germany has been keeping account of the growth of railroads in the world, and the figures presented annually seem to be generally and rightfully regarded with respect, for while it is practically impossible to accumulate absolutely accurate data concerning so large a subject, it may be asserted that the statistics given are as accurate as it is possible to have them.

Apparently all America looks alike to German eyes, for the total of railroad mileage on this side of the Atlantic is published as of North and South America, viz., 353,467 miles; next comes Europe with 214,665 miles, then Asia with only 67,051 miles, Africa with but 27,472 miles, and lastly Australia with 21,959 miles. Thus it will be observed that the total for the United States is 40,000 miles greater than the total for all of Europe, and moreover it is about 216,000 miles greater than the total for the next largest railroad nation, Germany, which has slightly less than 40,000 miles. Construction of railroads in the world is annually from about 15,000 to 17,000 miles, the first figure being the total for 1913, one of the very poorest of years for railroad building.

Railroad mileage with respect to area is densest in Belgium, where there are 48 miles of railroad for every 100 square miles of land. Saxony, one of the German kingdoms, ranks next with 34 miles; Baden, a grand duchy, about 25½ miles, while all Germany is only 19 miles. Great Britain is slightly more, 19.3 miles.

Continuing this comparison, it is revealed that although the United States as a whole averages but little more than 7 miles of railroad per 100 square miles of area, the State of New Jersey has nearly 30¼ miles, Massachusetts over 26 miles, Pennsylvania nearly 25¾ miles, Ohio nearly 22½ miles, and Illinois nearly 21½ miles. These figures show up well in comparison with most of the European countries excepting Belgium, which is small and densely populated. But our country in its entirety ranks much higher than Europe as to railroad mileage with respect to population, there being here over 26 miles per 10,000 people, while there it is less than 5 miles per 10,000.

Yet, in spite of this superiority, the United States needs many more railroads to develop its great resources and enable its swelling population to realize the opportunities which nature puts before them.

[From the New York Herald, Friday, July 30, 1915.]

## Wild Agitation and Excessive Cotton Production, Not War, Hurting the South, Says Editor

SENATOR HOKE SMITH AND OTHER POLITICIANS IGNORING FACTS IN THEIR DEMAND THAT THE BRITISH BLOCKADE BE RAISED, DECLARES MR. RICHARD H. EDMONDS, OF THE MANUFACTURERS RECORD—DENIES BANKRUPTCY MENACES THE SOUTH.

To the Editor of the Herald:

Senator Hoke Smith's letter in yesterday's Herald, in which he says "the crop of 1913 sold at from 11½ cents to 13½ cents a pound; to restore these prices will be worth to the cotton farmers this year more than \$200,000,000," reminds me of a story that, whether true or not, illustrates the point, to the effect that within a few weeks after the European war broke out last summer a rich American woman called on Ambassador Herrick at Paris and said this war must stop before September, because her daughter, Mary Ann, had to go to school on that date and her plans must not be interfered with.

Nations representing one-half of the world's population are in the most fearful life and death struggle which humanity has ever known. Millions, yes, even tens of millions, of men are at each others' throats and hundreds of millions are suffering more anguish than the world has ever witnessed before.

Nevertheless Mary Ann must go to school.

Ignoring entirely the fact that the South last year raised by far the largest cotton crop in its history, much more than would have been needed even under the most prosperous business conditions, and ignoring the stagnation in this industry throughout the world, Senator Smith makes the suggestion that it would be worth \$200,000,000 to the South to get for its cotton a price per pound equal to that received for the crop of 1913. Of course it would, but there are difficulties in the way. The crop of 1913-14 was in round numbers 14,500,000 bales; the crop of 1914-15 was practically 16,130,000 bales, or, including linters, over 16,900,000 bales. This increase of 2,000,000 bales would have broken the cotton market and brought about much lower prices than in the preceding year had there been no war or rumors of war.

Every Southern grower and dealer in cotton knows only too well that whenever the South raises an unusually large crop it has to pay the penalty in unusually low prices. Over and over again for generations this truth has been hammered upon the attention of Southern cotton-growers. When the production in the South exceeds the world's consumptive requirements then this section inevitably has to suffer a loss through low prices.

It has been the curse of the South that so many of its cotton-growers have permitted cotton to enslave them. The chains which shackle the Southern cotton-grower who raises cotton only and depends upon other sections for his foodstuffs will never be broken except through some desperate situation which by low prices compels all cotton-growers, as very many do, to keep their corn cribs and smokehouses at home, instead of in the West.

With a world war, inconceivably vast in its extent, inexpressibly horrible in its awfulness, covering practically all of Europe, and in the face of the overproduction in cotton last year far beyond the world's needs even in good times, Senator Smith, like the mother of Mary Ann, wants to ignore everything that is in the way of the South getting a good price for its cotton.

We have brought over from last year a very large surplus of cotton. Liverpool is carrying about twice as much American cotton as at this time last year. Italy has a large stock on hand, and the mills of this country have a far larger stock than they had at this time last year. But what do facts like these count for in the political economy of such men as Senator Smith and others who ignore every situation of this kind when they want to send Mary Ann to school?

Senator Smith makes the statement that the cotton farmers have reduced their crop about 25 per cent. It

is impossible to say what the reduction will be, but the acreage was reduced only a fraction over 15 per cent., and Senator Smith's statement of a 25 per cent. decrease in the crop is a pure guess.

Last fall many of the politicians, or so-called political leaders of this section, claimed that the South would be absolutely bankrupt unless the Government issued some hundreds of millions of bonds and bought 4,000,000 or 5,000,000 bales of cotton. All sorts of visionary schemes were worked to placard the nation with please "Help the South!" and with requests to "Buy a Bale of Cotton at Ten Cents a Pound!" when it was selling in the open market at five and six cents per pound. The South was posed before the nation by these people as a land of Lazarus-like beggars, too poor, too lacking in self-reliance and in backbone to help itself.

If the men guilty of this unwise and disastrously injurious effort to help the South could live to an age when Methuselah would seem in comparison to be but an infant they could never atone for the injury they did the South by belittling its own self-reliant, independent spirit and in giving to the world an absolutely false impression as to the lack of manhood and financial strength and stamina of the South.

Once more some of the same men are proclaiming that the South will be absolutely bankrupt unless Great Britain be compelled to let Germany buy cotton utterly without regard to the world-wide war conditions and to the fact that cotton is a raw material essential in the making of ammunition which is being used against Great Britain and the Allies.

On the international legal side the South ought to be well content to let the matter rest in the hands of President Wilson, a Virginian, who has surrounding him Burleson, a Texan; McAdoo, a Georgian; Gregory, a Mississippian; Daniels, a North Carolinian, and Houston, also a North Carolinian; Harding, an Alabamian, in the Federal Reserve Board; Williams, a Virginian, Controller of the Currency, and many other strong Southern men who are as deeply interested in the welfare of the South as are politicians and the papers that are making this campaign can possibly be.

This effort to arouse throughout the South an antagonism to Great Britain and to make more difficult President Wilson's task, claiming in connection therewith that the South will be bankrupt if the plans of its agitators be not carried out, is calculated to do the South even more harm than the unwise campaign carried on last fall, which cost the South more millions of dollars in public esteem and in the disposition of Eastern people not to try to do business in the South or to invest in the South than any possible loss in its cotton crops could have.

Some years ago the story was told, when the beloved Henry Grady made a speech, that one of his hearers criticised some of his statements and said: "Mr. Grady, the facts are against your theories." To this, so the story goes, Grady replied: "Facts embarrass me." In that respect Grady was different from many of the public men of the South today when facts are contrary to their theories. Facts do not embarrass them; they ignore facts. If a solid wall of facts stands in their way so much the worse for the facts.

They remind me of a story told by a schoolboy at the time when our little Virginia village suffered its first bombardment in the Civil War. The day after the bombardment many boys told wonderful tales about narrow escapes from shells. But one boy, whose love of truth was so great that he was very economical in the use of it, capped the climax of marvellous tales when he said that, seeing a big shell coming his way, he hopped on and straddled it and rode it until it reached the brick

wall of his father's house, and, knowing that he could not go through the wall, he dropped off, ran around to the other side, hopped on the shell again as it came through and took another ride.

Some of the men who are discussing Southern business matters ride their hobbies like this boy said he rode the shell, until they find themselves up against a brick wall of facts, and then, entirely ignoring the facts, they run around to the other side and again mount their hobby and go on undisturbed.

The South is in no danger of bankruptcy. It can only be seriously injured in all of its business operations by such statements as those of Senator Smith and others lately attributed to Senator Bankhead, and to similar ones which pestiferously active politicians and pessimists are making in and about the South. And though cotton is now costing more to raise than it did in the nineties, when prices were so low, the difference is not so great but what the South could survive with the same stamina that the farmers in that trying time displayed.

But, on the other hand, the South has this year raised the greatest grain crop in its history. It has turned its attention, as not since 1860, to the raising of food-stuffs. It will this year produce about 1,570,000,000 bushels of grain, or nearly 300,000,000 bushels more than last year. Its grain production will exceed last year's by about 23 per cent., as against less than 6 per cent. for the rest of the country. Sixty per cent. of the entire increase in grain in the United States will be in the South. This grain crop will exceed in value the most valuable cotton crop ever produced, to the extent of several hundred millions of dollars. And yet, in the face of these facts, regardless of the world conditions, the South is again being held up to the world as in danger of bankruptcy.

And Mary Ann must go to school!

I would rejoice to see the South get a high price for its cotton. But whether it gets a high price or a low price, the South is not going to be bankrupt. It is going to keep right on at the old stand, doing business, diversifying its agriculture, increasing its output of grain, raising more hogs and making more hominy, developing its industrial interests and proving itself worthy of the marvellous advantages with which it has been blessed.

If, after 50 years of peace, the South, the most richly endowed region on earth, could be bankrupted by low prices for one or even two cotton crops, it would prove to the world that its people had been improvident and thriftless and were not worthy to live in a land so favored by heaven. So long as there are so-called political leaders who use such situations as the present to make the world believe that the South has cotton strings for its backbones and cotton boils for its brains, so long will it be injured in the world's estimation by their work.

Very truly yours,

RICHARD H. EDMONDS,

Editor Manufacturers Record.

Baltimore, Md., July 28.

### THE TRUE INWARDNESS OF THE EUROPEAN STRUGGLE.

WESTON & AYCOCK,  
Attorneys-at-Law.

Columbia, S. C., July 26.

Editor Manufacturers Record:

Pardon a stranger for intruding on your time and patience, but your letter to the Columbia Record, which was published in that journal yesterday morning, pleased me so much that I am obliged to congratulate and thank you for the same. There are so few who perceive the true inwardness of the great struggle now going on in Europe that it is a deep satisfaction to find one who can put the truth so convincingly and forcefully as you have done in your letter.

I am almost without hope that any considerable part of our people will see the truth, and when I note the activity of the German-Americans, which is pursued as a right and without apology, I despair of the future of our country. And when I observe the deliberate effort of politicians in this State to ride into office on hatred of Great Britain, which they have themselves created by playing upon the ignorance of our unschooled people, my heart is made sick, for there seems to be no reason for hope.

No man believes more deeply in the unrestricted



he could  
around to  
s it came

ern busi-  
he rode  
st a brick  
acts, they  
unt their

It can  
operations  
nd others  
o similar  
nd possi-  
nd though  
id in the  
ce is not  
with the  
ing time

ear raised  
s turned  
of food-  
0,000,000

ore than  
st year's  
per cent.

he entire  
e in the  
the most

the face  
ons, the  
n danger

price for  
or a low

business.  
tput of  
iny, de-  
self wor-

It has  
st richly  
by low  
d prove

and so  
ed polit-  
esent to  
strings

so long  
y their

cord.

PEAN

26.

ne and  
which  
orning,  
tulate

ow who  
le now  
to find  
force-

e part  
te the  
ued as  
ure of  
effort

hated  
reated  
l peo-  
be no

stricted

right to sell cotton to any person who wants it than I, but the senseless demand to "make" Great Britain buy our crop stirs the profoundest exasperation within me. Nor would I willingly do anything needlessly to impair Britain's ability to win, for the British and French are fighting the battle of democracy against the most merciless imperialism that the world has ever known. No one free of prejudice can doubt that the rule of ancient Rome would seem mild by comparison with that which victorious Germany would impose upon the rest of the world, and in that I include our own country.

Your vigorous reply to the call of the Record for warlike measures against Great Britain has had a very satisfactory effect, for the demand to deal with her without regard to results is noticeably lessened, and there can be no doubt that every thinking man will be impressed with your view the moment it is presented.

Possibly it will all work out all right, but the day when it could work out all right of itself is gone, and somebody must work it out. It is fortunate that we have at the helm in this crisis a President possessing poise, sincerity, wisdom and a high sense of personal and national honor. The thought of what might have been causes shudders to pass over me.

W. T. AYCOCK.

#### "KEEP UP THE FIGHT."

Washington, D. C., July 30.

Editor Manufacturers Record:

Permit me to express my deep appreciation of your excellent letter in this morning's New York Herald, answering Senator Hoke Smith, Bankhead, et al., of that silly, superficial ilk. This is a generous qualification, for well might suspicion prompt a condemnatory qualification. Such ignorance of the effect of the hostility of this Government to the Allies cannot possibly be unknown to Senator Smith; therefore, if prejudice leads him so far as to penalize the country, and particularly the South, in its cotton, his attitude seems equally unpatriotic and dispicable. If it is at the bequest of German organization, then it is abominable in face of the attitude the nation is assuming to strengthen the righteous hand of our President.

Keep up the fight, for you know how to fight, and right is on your side. You may have read in today's paper also my letter on the same subject in the column "Letters from Herald Readers."

ELIJAH E. KNOTT.

#### "NEITHER TIME NOR PLACE FOR PESSIMISM"

New York, N. Y., August 2.

Editor Manufacturers Record:

I congratulate you most heartily on the cartoon on page 33 of the issue of July 29 of the MANUFACTURERS RECORD, and your reproduction of it on cards for its more general presentation of the South's wonderful possibilities. I have placed it on the wall in my office, and it has attracted much attention. The South indeed has "neither time nor place for pessimism," and as a loyal and enthusiastic son of the South, I take the greatest pride in showing it and thus educating the uninformed as to the possibilities of the South as a great grain and food-growing section of the country. I think every daily newspaper in the whole South should reproduce this cartoon, with appropriate editorial comments.

GEO. B. EDWARDS.

#### A VAST DEAL OF MISCHIEF DONE SOUTH.

FEDERAL RESERVE BANK OF DALLAS,

Dallas, Tex., July 15.

Editor Manufacturers Record:

Permit me to congratulate you on the stand you have taken with respect to the condition of the South and its ability to weather the storms.

You are entirely right on nearly all the points you have emphasized. A vast deal of mischief was done to the South last year, and it will require a long time to outlive it.

You are to be commended for the excellent work you are doing through the MANUFACTURERS RECORD and through your own individual utterances.

W. F. MCCALES.

## Pronounced Activity in the Birmingham District

ALL STEEL INDUSTRIES OPERATING ALMOST TO CAPACITY, PIG IRON STOCKS DECREASING WHILE PRICES ARE ADVANCING, AND GENERAL BUSINESS CONDITIONS ARE MUCH IMPROVED.

[Special Correspondence Manufacturers Record.]

Birmingham, Ala., August 2.

"Redivivus" might be truthfully written over the lintels of many industrial plants in the Birmingham district. Payrolls of the leading interests have recently been the largest in 18 months. As a general proposition it might be stated that all steel industries are operating almost to capacity, some to capacity: iron interests are so well sold ahead that they can demand an advance in price; foundries have become active again for the first time in over a year; wholesale machinery dealers admit a substantial betterment and very encouraging outlook; several thousand idle men have returned to work in the Birmingham district with the resumption of coal mining operations, coke plants, blast furnaces, etc.; water and gas pipe factories are operating on a large scale, and, finally, the increase in the grain yield, hay crop, raising of pure-bred cattle, etc., together with arrangements which look like a guarantee of fair prices for cotton, have created a substantial optimism in the rural districts. The recovery during the past month has been on a large scale, and by October, when the effect of larger payrolls will have been felt, the Birmingham district ought to be in as good position as it ever was.

The Tennessee company is operating its ingot and rail mills to capacity, with a foreign movement of billets regulated only by the availability of ship room. Not only this, but order-books show every indication of continued activity on the same scale. The wire plant of the American Steel & Wire Co. is working at about capacity. The Gulf States Steel Co. is on capacity operations; likewise the Bessemer rolling mill. The Tennessee company is regularly operating its basic slag fertilizer plant, and early in September will have completed its 13,000-gallon benzol plant. The Woodward Iron Co. will at the same time complete the 3000-gallon benzol plant which it is building at its by-product works, from which it will get the raw material. The Edison benzol plant, of similar capacity, draws its raw material from the same plant. The Woodward company will also early in September have completed its by-product additions and will be able to blow in Vanderbilt furnace.

The Tennessee company has practically no iron on hand, and is out of the foundry market for the rest of the year, advancing to \$12.50 for 1916 delivery. Of course, there will be no sales at that figure for that delivery yet awhile, but the advance demonstrates the strong position of the pig-iron interests.

Although the Sloss-Sheffield company has 100,000 tons on yards, it is so well sold ahead that it has blown in an additional furnace and was first to advance to \$10.50 for the rest of the year. Firm offers of that amount for remainder of the year have been turned down by an interest which is out of the market except for regular customers. The only interest quoting \$10 has no No. 2 soft or 3 and 4 foundry. Manufacturers, outside of the leading interest, which names \$12.50 as basis, will not quote for 1916 delivery. Consumers are becoming nervous, and have endeavored without avail to add 1916 delivery to last quarter purchases at the price named for the latter. There is every indication of \$11 iron in the near future. Certainly, if conditions continue as they are now, no 1916 metal will be bought under that figure.

Iron stocks are decreasing at the rate of 25,000 to 30,000 tons per month. Accumulations on January 1 of nearly 500,000 tons have gone below 200,000 of free foundry. There are about 75,000 tons of speculators' iron on the yards—not sufficient to influence a real buying movement.

Edward M. Hyde, who, with associates, proposes to build a \$4,000,000 shipbuilding plant at Mobile, has engagements to meet representatives of important interests in Alabama with a view to taking further steps toward inaugurating the proposed enterprise. The lower house of the Alabama Legislature has just passed a law exempting shipbuilding and other plants from taxes for a period of 10 years. However, there is still a strong

opposition, and the Senate and Governor may cause the defeat of the measure finally.

While the coal business on the Warrior River has not increased greatly since the opening of lock 17, indications are now that it will do so shortly. The Alabama & New Orleans Transportation Co. has arranged with the Tennessee company to transport coal from the Edgewater mines by rail to the Warrior River, 10 miles distant, where it will be loaded on barges for shipment to Mobile and New Orleans customers heretofore served by rail. These barges are of steel, and self-propelled, and carry 1000 tons each. The Mobile Coal Co. has ordered the construction of six ordinary type barges and secured a towboat for the purpose of engaging in the Warrior River trade. The Frisco system is helping matters by building spur tracks enabling nearby operators to reach the tipples at Cordova, the head of navigation on the Warrior. At the same time effort is being made to have another dam and lock built at lock 18, six miles north of Cordova, which would make the Warrior navigable still farther north. Government engineers have recently made an inspection. The Pratt Consolidated Coal Co. is regularly in the Warrior River coal trade from its mine at Maxine, right on the river, and the De Bardleben company is building spur tracks to the river. The Pratt towboats have been successful in securing large consignments of return freight at Mobile for merchants at Tuscaloosa and other points on the river.

Quite a stimulus was imparted to general conditions on Monday of this week, when the Jefferson County Bank, with a capital stock of \$500,000, threw open its doors in the handsome old home of the Jefferson County Savings Bank, which failed on January 29. The new bank has engaged to pay all the old bank's depositors in full, and will also pay interest on savings deposits, as though the old bank had never closed. The deposits amount to \$1,250,000. The new bank is possessor of the \$1,250,000 bank building of the old bank, and enjoys its long-held prestige. The officers are new. A. E. Jackson is president and T. M. Jones vice-president. They are North Alabama bankers. Much of the new capital stock came from North Alabama and Memphis.

Birmingham's \$300,000 viaduct over the railroad tracks at Sloss-Sheffield furnace is completed and will be opened for traffic during the week. The furnace interests and railroads shared the expense with the city. It is the first of a number of viaducts planned. It is several blocks long, and removes one of the gravest grade crossing dangers in the city.

The Sloss-Sheffield company has appropriated \$50,000 for the installation of electrical apparatus in its brown-ore mines at Russellville. It will generate its own power.

The Central Ice Co., Birmingham, announces the doubling of capacity of its present plant and the intention of erecting an additional one. R. F. JOHNSTON.

#### Zinc Smelter Wanted at Eagle Pass.

Eagle Pass, Tex., July 27.

Editor Manufacturers Record:

Due to the enormous quantities of zinc ores available on the Mexican side of the Rio Grande, an effort has been made to induce a zinc smelter to come here, and the matter is under consideration. The opportunity for such an industry is beyond dispute; our coal is more adapted for this industry than anything else, and with zinc at present prices this ought to be an inducement.

To a zinc smelter coming here we are prepared to give a free site, free water piped in, and coal, and a railroad siding is already on this site. That, with cheap labor, ought to be some inducement.

Nothing further, so far, has been done, but here is opportunity for some enterprising capitalist.

EAGLE PASS COMMERCIAL CLUB.

# Signs of the Times— Let Us Hear From Others

## Doing Things in Birmingham—No Dullness Here.

Birmingham, Ala., July 28.

### Editor Manufacturers Record:

We are working 22 hours per day on contracts for sugar machinery and chemical apparatus, a large portion of which is for export to Cuba and South America. We also have several contracts for delivery to Eastern factories, but do not care to give particulars on contracts at this time.

### TRUSTEE PAYNE & JUBERT MACHINE & FOUNDRY CO.

[This is a pretty good sample of business activity, and shows how a Southern foundry and machine shop is selling its products to Eastern shops, as well as to Cuba and South America.—EDITOR MANUFACTURERS RECORD.]

## Building Another Steel Plant to Meet Domestic Trade.

N. & G. TAYLOR CO.,

Makers of Open-hearth Steel Bars, Billets, Sheet and Tin Bars, Black Plate, Tin Plate, Etc.

Philadelphia, July 28.

### Editor Manufacturers Record:

It is interesting commentary upon the remarkable increase in the demand for high-grade open-hearth steel in this country that we are obliged to consider another increase in our steel-making capacity at our Cumberland (Md.) plant, where our open-hearth furnaces, rolling-mills, etc., are located, and we are now asking for bids on another open-hearth furnace and other equipment made necessary by the increase in our steel output.

Six months ago we completed extensive additions to our open-hearth department with a view to the future. It is worth noting that practically our entire output has been sold over the remainder of this year and that this is due almost entirely to increase in our domestic business, as we have taken no war orders and our export sales are a very small part of our total tonnage of sales.

N. & G. TAYLOR CO.

## From Railroad Management to Manufacturing Operations.

(Special Correspondence Manufacturers Record.)

Norfolk, Va., July 29.

The R. W. Whitehurst Mfg. Corporation of Norfolk, Va., woodworking and planing-mill, foundry and machine shops, was established in 1901. It had a large measure of success and grew until it was found necessary to change the location, so the plant was moved to its present site and rebuilt in 1912. It now occupies 125,000 square feet of ground, which makes it one of the largest plants of the kind in the South. The buildings are equipped with the latest and most modern type of machinery. It is located on the main line of the Norfolk & Western Railway, which connects with the Belt Line Railway, thereby giving fine shipping facilities. This plant has recently been purchased by Mr. Charles H. Hix, former president of the Norfolk & Southern Railway, and every department of the plant is under his personal supervision. The planing-mill and woodworking department, the foundry, blacksmith department and the storeroom, in fact all departments are so arranged that, while they are separate parts of the big plant, they are a part of the big unit and show a unanimity of purpose.

The product of this company is being sold extensively throughout the South and East, with a recently-developed good business in the West. The company manufactures step-ladders, hand trucks, platform trucks, railroad trucks, corn planters, cotton planters, peanut planters, fertilizer distributors, golf-course rollers, lawn rollers, push-carts and many other implements. The Monarch Platform Truck is one of this concern's big products. It can be turned around in its own space and is easily operated with one hand. The Boss Ladder is another leader of the company, as is the Boss Cider Mill, which has hardwood frames, heavy cast-iron

beams, high-grade steel screw and is very handsomely finished. All of these machines are controlled by patents owned by the Whitehurst Corporation. The company is very busy, running full time in filling orders.

I. S. FIELD.

## Improved Iron and Steel Conditions.

The Matthew Addy Company's market report, under Cincinnati date line of July 31, says:

"The pig-iron situation is at last catching up with the pace set by steel. For awhile it lagged, but today it is most decidedly active in all branches, and the past week has seen advanced quotations in many directions.

"The demand for war materials is, of course, swelling the tonnage, but there is an increase in domestic business. Railroads are placing orders for rails and cars.

"The foreign demand for steel is greater today than has ever been known in the history of the trade. Steel-making furnaces are now operating at about 95 per cent. of their capacity, but are not able to catch up on orders.

"The demand for steel advanced the price of basic and Bessemer pig-iron, so that some furnaces which formerly made nothing but foundry grades are now running on basic, thus reducing the possible output of foundry iron.

"Ten days ago, noting the heavy advance in melting scrap and the fact that pig-iron had not stiffened materially in spite of its heavy increase in production and consumption, a number of speculators bought round tonnages of Southern iron. This, together with large orders placed by consumers, has given the Southern furnaces very satisfactory order-books. They have all either advanced their prices or withdrawn from the market. Inquiry for next year is growing, but furnace-men are not anxious to sell for delivery beyond 1915.

"Southern Ohio furnaces have been selling freely, and have advanced prices 50 cents for shipment over the balance of this year."

## A \$12,000,000 War Order for Baltimore Likely to Be Doubled or Trebled.

The war order reported in the MANUFACTURERS RECORD last week as received by Bartlett Hayward Company, running far into the millions, is now announced as for Russia, with a minimum of \$12,000,000 and likely to be trebled, carrying it possibly before completion to \$30,000,000 or \$40,000,000. A new and very extensive plant will be built in order to rush the work of filling this order as rapidly as possible. Plans have been received for the first two buildings as follows: Two stories high, 422x71½ feet, for machine shop; one story high, 337.5x171 feet, for boiler and forge shop. These buildings will be equipped with machinery for manufacturing war munitions. Alton S. Miller, of Humphries & Miller, engineers, New York, has been engaged as consulting engineer, and J. Henry Miller, Inc., Baltimore, has the general building contract. The American Bridge Co., New York, will furnish the structural materials. Shipments are to be made from the river-front near Baltimore, where larger works and a shipping depot will be established. The Bartlett Hayward Company is a \$1,500,000 corporation operating at Baltimore for many years in the construction of gas plants, sugar machinery, special machinery, etc., for this and foreign countries.

## France Wants Agricultural Machinery.

Georges Ragot, Taverny, Province Seine et Oise, France:

"I would like to secure the agency for France for agricultural machinery, such as reapers and mowers, and so on. I would like to meet with a house in that line of the first class, and I can assure them a good business, but the goods would have to be delivered to the purchasers here free of transportation charges and custom-house duties also paid."

## Southern Industrial Activities.

During July the Construction Department of the MANUFACTURERS RECORD published 5718 items relative to industrial and building enterprises, railroad and financial developments, and general business interests in the South and Southwest. These, added to the 27,536 items previously detailed for the preceding six months, make a total of 33,254 items for seven months, January to July, inclusive.

Under appropriate headings the July items are detailed in the following table:

Industrial and Developmental.	
Bridges, Culverts, Viaducts.....	114
Canning and Packing Plants.....	25
Clayworking Plants.....	25
Coal Mines and Coke Ovens.....	25
Concrete and Cement Plants.....	25
Cotton Compresses and Gins.....	25
Cottonseed-oil Mills.....	25
Drainage Systems.....	25
Electric Plants.....	111
Fertilizer Factories.....	25
Foundry and Machine Plants.....	46
Gas and Oil Enterprises.....	25
Ice and Cold-storage Plants.....	27
Iron and Steel Plants.....	11
Irrigation Systems.....	2
Land Developments.....	25
Lumber Manufacturing.....	41
Metal-working Plants.....	112
Mining.....	25
Miscellaneous Construction.....	71
Miscellaneous Enterprises.....	112
Miscellaneous Factories.....	25
Motors and Garages.....	25
Railway Shops, Terminals, Roundhouses, etc.....	4
Road and Street Work.....	25
Sewer Construction.....	25
Telephone Systems.....	15
Textile Mills.....	25
Water-power Developments.....	25
Water-works.....	25
Woodworking Plants.....	25
Buildings.	
Apartment-houses.....	128
Association and Fraternal.....	25
Bank and Office.....	25
Churches.....	25
City and County.....	124
Courthouses.....	25
Dwellings.....	648
Government and State.....	25
Hospitals, Sanitariums, etc.....	60
Hotels.....	44
Miscellaneous.....	25
Railway Stations, Sheds, etc.....	22
Schools.....	25
Stores.....	25
Theaters.....	25
Warehouses.....	25
Railroad Construction.	
Railways.....	109
Street Railways.....	14
Financial.	
Corporations.....	75
New Securities.....	558
Fire Damage, etc.....	433
Machinery, Proposals and Supplies Wanted.....	171
Total for July.....	5,718
Items previously detailed since January 1.....	27,536
Total for 7 months.....	33,254

## Heavy Shipments of Arkansas Bauxite.

In regard to shipments of bauxite from Little Rock, Carl J. Baer, secretary of the Little Rock Chamber of Commerce, writes as follows:

"The Aluminum Company of America has mines 18 miles from Little Rock covering thousands of acres of the most valuable bauxite. It ships between 1000 and 1500 tons daily to East St. Louis, Ill., where this ore is reduced to alumina; from this point it is shipped to Niagara Falls, and again reduced to aluminum, after which it is manufactured into utensils and other manufactured articles.

"The Aluminum Company desires to move this ore by river, and preparations are being made to navigate the Arkansas River and to move by self-propelled barges from Little Rock to East St. Louis at least 1000 tons per day, a distance of 780 miles. In order to move bauxite to St. Louis the transportation company handling this ore will haul all kinds of freight down the Mississippi and up the Arkansas on the return trip. The Chamber of Commerce of Little Rock is behind the movement, and has appropriated \$50,000 for the purpose of assisting in navigating the Arkansas River."

The Front Royal-Washington Transportation Co. capital \$50,000, has been chartered and organized at Front Royal, Va., and will operate automobiles and freight trucks from there to Washington, Va., about 15 miles. Passenger, baggage and express matter will also be carried. W. W. Sonner of Front Royal is president, F. C. Baggarly is secretary and C. R. Wood treasurer, both of Washington.



# Activity in the Cottonseed-Oil Industry

STATISTICS SHOW A PHENOMENAL INCREASE IN EXPORTS OVER THOSE OF LAST YEAR.

The report of the Bureau of the Census, on the output of the cottonseed-oil mills of the country, issued July 30, shows that 5,779,665 tons of cottonseed were crushed and 832,401 running bales of linters were produced from the cotton crop of 1914.

The report of cottonseed crushed from the crop of 1914, published March 18 last, included 681,315 tons of seed, estimated as remaining to be crushed after the date of the return. In view of this large quantity remaining to be crushed and of the fact that many establishments were not in a position to give a close estimate of the amount, it was believed desirable to make another canvass. Since practically all the mills had completed the season's crush by June 1, every active establishment was requested to forward another return showing the total quantity of cottonseed crushed from the crop of 1914 and of linters produced, together with an estimate of seed, if any, remaining to be crushed after the date of the return.

The following table gives the corrected figures for the season of 1914-1915:

State.	No. of cottonseed-oil mills.	Cottonseed crushed (tons), crop of 1914.	Linters obtained, running bales of 1914.
Alabama	92	502,374	69,924
Arkansas	43	314,308	46,242
Florida	4	33,150	3,060
Georgia	155	1,053,927	141,478
Louisiana	20	175,924	24,889
Mississippi	70	527,905	78,781
Missouri	4	32,226	4,062
North Carolina	66	387,765	45,497
Oklahoma	61	410,733	68,929
South Carolina	95	460,757	58,416
Tennessee	23	277,939	41,601
Texas	233	1,514,505	238,395
All other States	9	88,161	11,327
United States	885	5,779,665	832,401

\*Includes 34,222 tons of seed estimated to be crushed and 559 bales of linters to be obtained after the date of the return.

†Includes for 1914: Arizona, 2 establishments; California, 3; Illinois, 2; Kansas, 1, and Kentucky, 1.

That the European war has not been detrimental to the export of American cottonseed oil and cake, says the Wall Street Journal, is indicated by the figures for the 11 months ended with May, during which period this country exported 291,550,310 pounds of cottonseed oil, valued at \$19,969,360, compared with 186,116,565 pounds, valued at \$13,312,904, in 1914, and 301,775,693 pounds, valued at \$19,735,718, in 1913.

In May, 1915, 32,753,294 pounds were exported, valued at \$2,396,994, against 13,485,970 pounds, valued at \$992,692, for the same month in 1914. This enormous increase in the export of oil is partly ascribed to its use in munitions.

The same applies to cottonseed meal cake, for during May, 1915, 70,409,983 pounds were exported, valued at \$700,658, against 26,112,416 pounds, valued at \$401,171, in 1914. For the 11 months ended May, 1915, exports of this product totaled 1,445,811,498 pounds, valued at \$18,471,715, against 763,862,438 pounds, valued at \$10,519,287, in 1914, and 1,008,077,064 pounds, valued at \$14,380,977, for the same period in 1913.

Since the British Order in Council went into effect Great Britain's enemies have not been getting directly, either the oil or cake. On the other hand, the export of oilcake and meal to Denmark from this country assumed enormous proportions, that little country taking during May, 1915, 55,268,984 pounds, valued at \$733,636, against 15,438,292 pounds, valued at \$185,746. In the 11 months ended May, Denmark imported 1,047,608,429 pounds of cake and meal, against 329,544,747 pounds, valued at \$4,265,956, in 1914, and 393,256,396 pounds, valued at \$5,105,596, for the same period in 1913. A large part of the huge increase over normal takings undoubtedly found its way into Germany.

Norway and Holland have undoubtedly performed the same service for the Teutonic Allies in the matter of cottonseed oil, for in May the Netherlands took 15,900,633 pounds of oil, valued at \$1,129,834, against 591,134 pounds, valued at \$44,023, in 1914, and for the 11 months ended with May, 76,545,901 pounds, valued at \$5,575,153, against 26,744,517 pounds, valued at \$1,725,920, for the same period in 1914, and 71,483,952 pounds, valued at \$4,514,951, in 1913. Norway took 24,640,601 pounds, valued at \$1,539,883, for the 11 months ended May, 1915, against 6,821,986, valued at

\$477,876, in 1914, and 8,497,224 pounds, valued at \$564,205, in 1913.

The following table shows the export movement of cottonseed oil from this country to the rest of the world for the 11 months ended May, over a period of three years (figures in pounds):

Country.	1915.	1914.	1913.
Austria-Hungary	70,394	4,172,176	8,083,584
Belgium	11,646	3,442,461	1,911,149
France	7,633,461	8,125,649	17,593,971
Germany	62,871	7,548,372	13,136,591
Italy	15,054,489	13,705,360	38,371,951
Netherlands	76,545,901	26,744,517	71,483,952
Norway	24,640,601	6,821,986	8,497,224
Turkey	354,910	4,886,321	11,407,768
United Kingdom	61,229,932	29,715,093	30,251,535
Other Europe	18,439,161	6,933,691	9,277,818
Canada	19,966,114	25,328,365	24,646,504
Mexico	4,568,505	6,010,363	23,641,062
Cuba	6,707,434	4,325,274	4,610,265
Other West Indies	6,301,772	7,508,382	8,977,363
Argentina	15,224,360	13,735,148	13,685,683
Brazil	1,649,690	2,229,248	3,239,140
Other S. A.	1,996,881	4,657,111	3,346,238
Other countries	4,551,009	5,528,391	5,306,024
Total	291,550,310	186,116,565	301,775,693

The above figures show the effect of the British block-

ade in turning trade from its normal channels, for the Teutonic Allies obviously have been getting their needs through adjoining countries. However, with a tightening of the blockade, the imports of cottonseed oil into Scandinavia and Holland will become smaller as the war gets older.

The following table shows the exports of American cottonseed cake and meal to Europe for three years (figures in pounds):

Country.	1915.	1914.	1913.
Belgium	223,100	19,685,564	38,953,330
Denmark	1,047,608,429	329,544,747	393,256,396
Germany	6,819,250	226,852,267	346,361,622
Netherlands	15,469,040	22,086,420	62,479,858
United Kingdom	165,632,736	127,081,104	158,149,946
Other Europe	210,658,943	38,612,336	68,575,912
Total	1,445,811,498	763,862,438	1,008,077,064

The outstanding feature of the above tables are the huge takings of Denmark, which are more than two-thirds of the entire export total of cake and meal. The peculiar point is that the Danish imports are considerably larger than her normal takings and the normal takings of Germany combined. While Austria and Turkish figures are not available, it would appear that Denmark's takings would be sufficient to give all these countries almost a normal supply. It is believed in the trade that Germany is using the cake and meal as a substitute for other staples.

## World's Consumption of American Cotton for 1914-15 About 13,900,000 Bales

[Special Dispatch to Manufacturers Record.]

New Orleans, La., August 3.

Exports of cotton for the season of 1914-15:

	Bales.
Great Britain	3,805,824
France	677,014
Continent (including Japan, China and Mexico)	3,874,385
Canada	184,685
World's consumption of American cotton	14,134,000

While the consumption is put at 14,134,000 bales, it

is estimated that this total includes about 250,000 bales at continental outports not included in the visible supply and not necessarily belonging to spinners, and which places under ordinary conditions hold no stock of cotton. If this amount were deducted it would point to a total world's consumption of American cotton for the year ending July 31, 1915, of about 13,900,000 bales.

HENRY G. HESTER,

Secretary New Orleans Cotton Exchange.

### To Manufacture Dye Chemicals in Tennessee Out of North Carolina Raw Materials.

An initial investment of about \$250,000 and a developing investment of about \$500,000 is proposed by the Clinchfield Products Co., organized to build a plant at Johnson City, Tenn. Henry A. Kaufman is superintendent, and will at once begin constructing the buildings, having plans for the following structures: 300x60 feet; 100x60 feet; 160x120 feet; brick or concrete construction. These buildings will be equipped with machinery for manufacturing barium chloride, barium dioxide, lithophone and several other acids of a similar nature used for dyes, colors and enamel. The products will be obtained from feldspar mined in Western North Carolina on the Carolina, Clinchfield & Ohio Railroad.

### Flour Mills Increasing in North Carolina.

W. A. Graham, commissioner of agriculture, has stated that this year's wheat crop will more than meet the requirements of the people of North Carolina, for the first time since 1860. This achievement is arousing a great deal of comment throughout the State and elsewhere, and it is hoped that the increased grain production in North Carolina will be made permanent.

Considerable comment is being made at this time of the fact that while North Carolina has a number of flour mills, it will be of still further advantage to the State to have all of the wheat raised in North Carolina ground into flour instead of having any of it shipped to mills elsewhere.

There is already a flourishing flour-mill business in the State, one mill at Durham, owned by Gen. Julian S. Carr, putting out 250 barrels a day, or 1500 barrels a week. It is spoken of as one of the finest equipped

flour mills south of Baltimore, and one of the best in the entire country.

The McNeal roller mill at Fayetteville is reported as running night and day to grind the thousands of bushels of wheat raised in that section of North Carolina and the upper part of South Carolina. The mill is grinding 175 bushels a day.

A flour mill company, incorporated with a capital of \$100,000, has been formed at Charlotte, and there are a number of other new companies throughout the State, so that a very good beginning has been made in the development of this important industry.

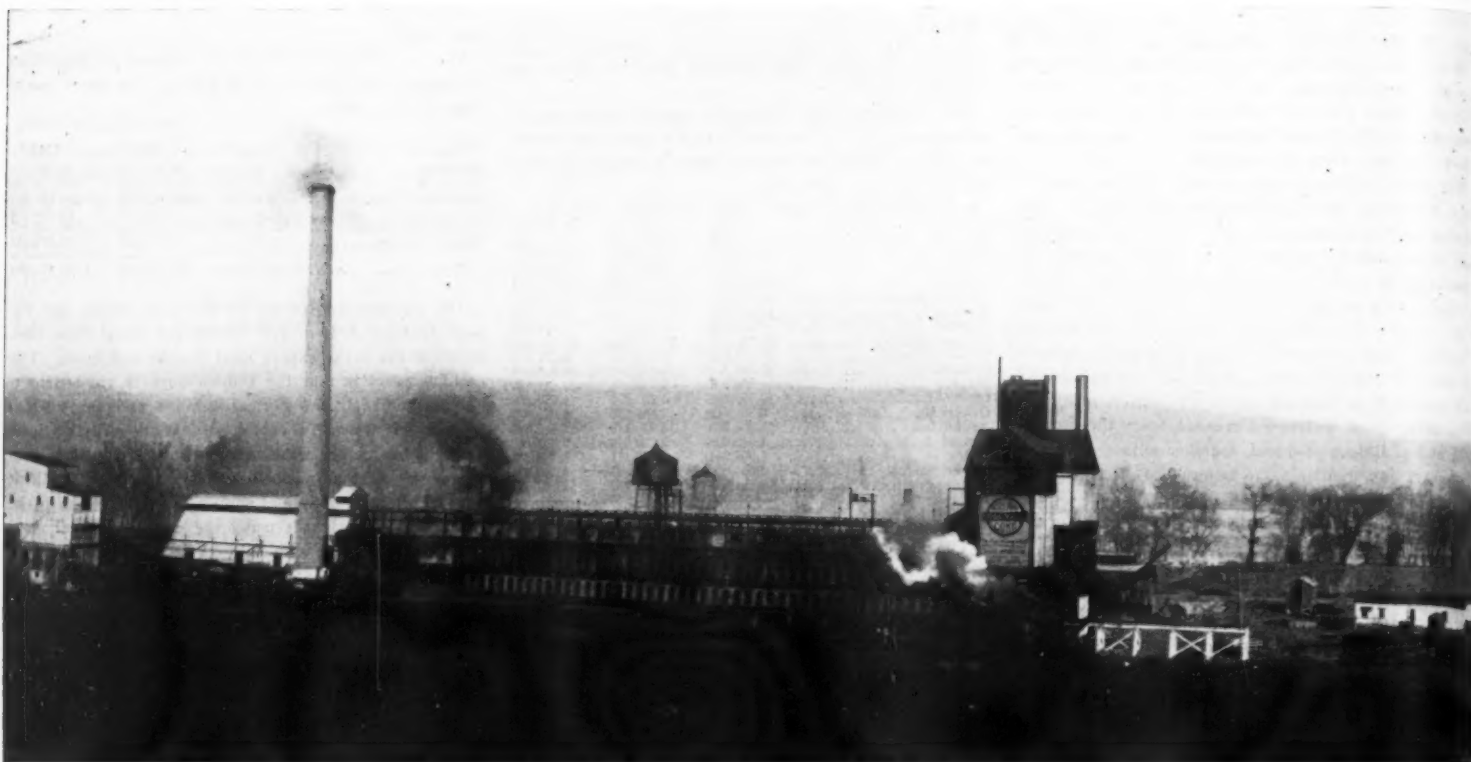
### Steam Barge on the Ocmulgee River.

W. H. C. Johnson, general secretary of the Macon (Ga.) Chamber of Commerce, sends the MANUFACTURERS RECORD a copy of the Macon News, which describes the first trip of the steam barge "Ocmulgee" preliminary to the establishment of regular service on the Ocmulgee River there. The vessel, driven by her two engines, which use crude oil for fuel, went nine miles down the stream and then returned to Macon, attaining a speed of 11 miles per hour with the current and 5½ miles when running against it. The barge draws six inches of water at the bow and 20 inches at the stern. It was built by the J. S. Schofield Sons Company. W. E. Dunwoody and others are interested in the line. The superintendent is F. W. Ingram.

### Cotton Goods for Norway.

Hjalmar Minde, Postbox 184, Bergen, Norway: "I am seeking for a cotton stuff as sample inlaid, signed V. O. 1 15/7 without any colored edge, 5 ounces, 38 inches, and further as sample V. O. 2, 15/7, 34 and 38 inches, and sample V. O. 3, 15/7, similar to French, 42 inches."

## By-Product Coke Plant to Spend \$700,000 on Enlargement



BY-PRODUCT PLANT OF KENTUCKY SOLVAY COKE CO., ASHLAND, KY.

According to advices to the MANUFACTURERS RECORD as to the purpose of the Kentucky Solvay Coke Co. to build additional ovens at Ashland, Ky., the plans of the company include the doubling of the present plant. This means that 54 additional ovens will be built, having a capacity for coking 1000 tons of coal per day, making the total capacity of the enlarged plant 2000 tons per day. It is expected that the new ovens will get into run the early part of next year.

These ovens are of the Semet-Solvay horizontal flue

regenerator type, and have a capacity of about 20 tons of coal per oven per day. The photograph herewith shows the plant as it is at present. The new ovens will be located in the space at the right of the coal bin shown at the end of the oven block.

The cost of the new installation will be about \$700,000, including the construction of an entirely new plant for the screening and preparation of the coke for the entire works. The present plant for coke preparation is shown at the extreme left of the photograph.

This coke-handling plant will be fireproof in every detail, and will take the place of a temporary installation which has been used to work out the details of preparing the coke to meet the local market conditions.

The enlargement of the plant is made necessary by the growing demand for the coke, which has proved very successful in the blast furnaces and foundries of the district. A very satisfactory trade in domestic coke has also been built up.

The general offices of the company are at Syracuse, N. Y. W. H. Blauvelt is consulting engineer.

### Getting Ready to Resume Business in the War Zone.

"While the guns are still sounding," as the correspondent puts it, business organizations in the Eastern theater of war are looking to the time when the fighting will cease, and are laying plans for a bigger business than ever before. Right in Warsaw, a storm center of the war for months before the final stages of the struggle for its possession were reached, the Ageya Company, representative of the Russo-American Trading Co., Ltd., is asking that American manufacturers get in touch with the company so that they may be ready to start business at once on the conclusion of peace. The courage and optimism of the correspondent are not the least interesting features of the communication received. The correspondence follows:

"Warsaw, June 28.

"Manufacturers Record,  
Baltimore, Md.:

"Gentlemen—Referring to your recent favor, we believe the present moment specially fit to inquire which goods could be introduced from your country to Russia, and we are ready to give you any information in the machinery and technical line.

"We also enclose an advertisement which you will kindly insert in the proper place of your MANUFACTURERS RECORD, and for which we are ready to pay as soon as we shall have received your note and the respective number.

"We also enclose several copies of our circular, which you will have the kindness to distribute among the parties concerned.

"Awaiting your further news, we are, gentlemen,

"Yours faithfully,

"THE AGEYA COMPANY."

The advertisement, which accompanies the letter,

makes the suggestion that manufacturers and exporters who desire to "introduce their products promptly and permanently into Russia" get in communication with the company.

The circular-letter referred to is as follows:

"Warsaw, June 30.

"Gentlemen—We have the honor to inform you that on account of the changes in our commercial connections with foreign countries we desire to replace our late providers by those from the United States, England, France and Sweden. The undersigned, one of the owners of our concern, has been for many years engaged in the trade of machines, tools, etc., for technical purposes. With a thorough knowledge of the requirements of our market, we had the opportunity of acquiring the entire confidence of our customers, and particularly those of Russia, Kingdom of Poland and Galicia, thanks to our travelers who were visiting regularly those rayons.

"You should, therefore, oblige us by sending at our address your illustrated catalogue for the said articles, with lowest quotations, and stating your terms and commission for us in case you should honor us with the representation of your valued concern.

"We are for the said reasons in position to introduce your goods here within a comparatively short time.

"If we are writing you already while the guns are still sounding, it is with the purpose of getting in time the necessary information so as to start immediately the business when the time arrives. We could then pass you our orders and respectively transmit you those of our customers.

"There is not the slightest doubt that the business to

come will attain a much higher figure than that of the past.

"Awaiting your kind reply at your earliest convenience, we are,

"Yours truly,

"THE AGEYA COMPANY."

### Electric Light Association to Meet.

A program of considerable interest is being arranged for the meeting of the National Electric Light Association, Southeastern Section, which is to be held at Asheville, N. C., Wednesday, Thursday and Friday, September 22, 23 and 24. The tentative program includes a number of papers on technical subjects, and also a series of entertainments and drives through the picturesque country in and around Asheville.

Subjects named for discussion are as follows:

"An Accounting Subject," by A. A. Wilbur, Columbus, Ga. (Consolidated Power Co.)

"Advertising and Its Direct Relations to Central Station Field," by J. J. McManus, Harrison, N. J. (General Electric Co.)

"Electric Heating Devices," by W. H. Stearns, Pittsfield, Mass. (General Electric Co.)

"Distant Controlling Switchboard Design," by Thos. W. Fuller, Atlanta, Ga. (Westinghouse Electric Co.)

"Electric Power for Driving Textile Mills," by H. A. Orr, Anderson, S. C. (Southern Public Utilities).

"Efficiency in Serving the Consumer," by J. H. Mohl, Cordele, Ga.

"Sale of Current to Municipally-Owned Distributing Systems of Street Lighting," by Wm. Rawson Collier, Atlanta, Ga. (Georgia Railway & Power Co.)

"High-Tension Systems and Their Operation," by W. E. Mitchell, Birmingham, Ala. (Alabama Power Co.)



# Belgian People and Belgian Farms in North Carolina

(Special Correspondence Manufacturers Record.)

Wilmington, N. C., July 23.

Plowed out of their homes by the ruthless German war machine and left to perish by the wayside from want of sustenance and shelter, 12 Belgian families, totaling 60 people, have been rescued and transplanted as a colony to St. Helena, near Wilmington, N. C., where they are located on land that is much like that upon which the German army is now encamped, but more plentiful.

It has taken approximately \$2000 per family and six months' time to bring these families to North Carolina soil. Most of them arrived in April and May, and some industrious ones sold vegetables of their own cultivation within 70 days after they arrived.

It took a representative of Hugh MacRae & Co. of Wilmington, N. C., working

with the priests and burgomasters at the various concentration camps in Belgium several months to select just the right kind of families desired.

After they arrived here a farm of 10 acres to a family was placed at their disposal, with a cottage completely equipped for housekeeping and the land prepared ready for planting the day they arrived.

It is the plan of Mr. MacRae, who is the head of the concern that is developing two tracts of land totaling 70,000 acres for colonization purposes, to give the Belgian-Americans every possible chance to make good. If they do demonstrate their worth and thus establish confidence among their fellow-countrymen, in the agricultural and industrial possibilities of the South, it is only natural to suppose, according to Mr. MacRae, that there will be a great influx of immigration of this character to this section when the war ends. Mr. MacRae believes they will make good.

ROY G. BOOKER.



No. 1.—Miss Ida McLean Black (X), a canning demonstrator, teaching the Belgian girl from each household to use the home canning outfit for surplus vegetables.

No. 2.—St. Helena Colony, North Carolina. Three happy little maidens, recently transplanted from concentration camp in Holland. Photo, May 26, 1915.

No. 3.—St. Helena Colony, North Carolina. Home and family of John de Bruijn. Arrived March 7, 1915. Photo, May 26, 1915.

No. 4.—St. Helena Colony, North Carolina. A. Fluere's farm—potato field. Planted after his arrival February 16; ready for market 73 days later. Photo, May 26, 1915.

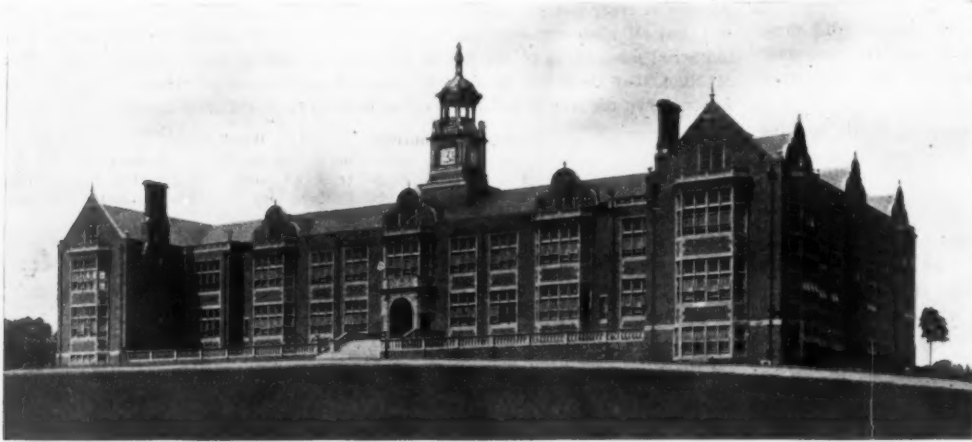
No. 5.—St. Helena Colony, North Carolina. Cabbage—potatoes to the right. Frans van der Berge's farm. Several crops, planted after his arrival on February 14; ready for market when photo made, May 26, 1915.

No. 6.—A carload of Holstein cattle bought for the use of the Belgians in New York State.

## New Buildings of State Normal School

Important additions to Maryland's educational facilities are provided in the Maryland State Normal School buildings now about completed at Towson. Herewith are two photographic views of the new structures. Parker, Thomas & Rice, Baltimore and Boston, were the architects, and C. L. Reeder of Baltimore was the consulting engineer for the power-house. The administration build-

ings: Sheet metal, Vaile & Young; painting, G. T. Rosensteel Company; plumbing, Joseph A. Fowler; interior woodwork, Lafayette Mill & Lumber Co.; ornamental iron, Chesapeake Iron Works, each of Baltimore; faced brick, Washington Hydraulic Press Brick Co.; bricklaying, Frank Wagner; marble and mosaic, National Mosaic Co.; each of Washington, D. C.; slate



STATE NORMAL SCHOOL, ADMINISTRATION BUILDING, TOWSON, MARYLAND.

ing is 200x55 feet, with wings 144x46 and 90x38 feet; steel, marble, brick and stone construction; cost about \$275,000; Morrow Bros. of Baltimore, general contractors. Other contracts were distributed as follows: Fireproofing, Hammett Fireproofing Co., Washington, D. C.; excavating and grading, James G. Parlett, Govans, Md.; granite, Woodstock Granite Co., Woodstock, Md.; tile partitions, Keystone Fireproofing Co., Philadelphia; structural steel, Dietrich Bros.; bricks,

roofing, Walton & Gail; terra-cotta, Atlanta Terra-Cotta Co., New York; cut stone, Graham & Graham; steel sash, Trussed Concrete Steel Co., Youngstown, O.; glass, Pittsburgh Plate Glass Co., Pittsburgh, Pa.; reinforcing steel, Concrete Steel Co., New York; partitions, Keystone Fireproofing Co., Philadelphia; electric work, Electro-Mechanical Co.; heating and plumbing, Riggs, Distler & Stringer; both of Baltimore.

The power-house cost about \$200,000, and is a two-



STATE NORMAL SCHOOL, DORMITORY AND POWER-HOUSE.

D. B. Record; faced brick, Hydraulic Press Brick Co.; bricklaying, Chas. F. Berndt; lumber, Wm. D. Gill & Son; cement, National Building Supply Co.; plastering, J. A. Fowler; terra-cotta, Maryland Terra-Cotta Co.; millwork, Otto Duker & Co.; painting, Wm. H. Anderson; marble, Evans Marble Co.; sheet metal, Wm. F. Zeller Company; slate roofing, G. W. Loewenstein; ornamental iron, Wansch & Dobos; hardware, Stewart-Crook Company; each of Baltimore.

The dormitory is a three-story 247-foot building with two 83-foot wings; cost about \$150,000; Edward Brady & Son, contractors, Baltimore. Other contracts as fol-

low: story brick and stone 120x100-foot fireproof structure with slag and concrete roof, concrete floor and fire doors. Sweetser Linthicum, Baltimore, general contractor. Other contracts as follows: Concrete, Price Concrete Construction Co.; millwork and lumber, Lafayette Mill & Lumber Co.; brickwork, John Wyckoff; ironwork, Dietrich Bros.; miscellaneous metal, Peace & Peace; machinery, Riggs, Distler & Stringer; roofing, Wm. F. Zeller; rough brick, Burns & Russell; face brick, E. D. Boone; ice machinery, Chas. Zies & Son; each of Baltimore; tapestry brick, Hydraulic Press Brick Co., Washington, D. C.; chimney, Gustavus Chimney Construction Co., New York.

### For a \$3,000,000 Shipyard.

That a \$3,000,000 shipbuilding plant will be established in Georgia is indicated by a statement that it is proposed to amend the State Constitution so as to exempt from taxation for 10 years any shipyard that may be established in Georgia with \$3,000,000 or more capital. L. R. Akin, State Senator, Atlanta, has offered the amendment to the constitution, and reports state he has definite information relative to capitalists planning an investment exceeding \$3,000,000 for building shipyards at Savannah or Brunswick.

### West Indies Wants Food Products.

Caribbean General Agency, St. Lucia, West Indies: "The line we are following principally is the food line, and any manufacturer of provisions generally who desires representation may write to us. Our work is to book orders from merchants and other buyers, and to receive a commission for same, requiring sole agencies. Articles that interest us are butter, beans, meal, oats, onions, potatoes, pork, beef (canned or salted), illuminating oil, lager beer, corn, etc. We are now in touch with a flour mill, and trust the business will mature."

### Southern Employers' Welfare Conference.

[Special Correspondence Manufacturers Record.]

Black Mountain, N. C., July 30.

Representatives from ten States and seven different industries attended the Welfare Conference held recently at Black Mountain, N. C., under the auspices of the Industrial Department of the Southern Summer School of the Young Men's Christian Association.

The program touched fully presents methods and achievements in welfare work, and suggestions for future developments were made.

Mr. David Clark, editor of the Southern Textile Bulletin, Charlotte, N. C., spoke on "The Effect of Welfare Work on Industrial Unrest." He said, among other things:

"Welfare work is of great value in increasing the moral tone, the health and efficiency of the workers, but I value it most highly because it brings the employer and the employee into closer touch and tends to promote that harmony which will eliminate industrial unrest."

Dr. George J. Fisher, International Y. M. C. A. Secretary for Physical Work, New York city, pointed out that "the development of our factory system has upset the balance between work and play; between normal muscular expansion and strain; between variety in experience and monotony. In other words, our industrial system has upset the physiologic balance by which organic vigor is maintained. In a single period of 13 years machinery displaced muscular energy to extent of 70 per cent. in the hand trades alone. Work is not harmful. Rather the lack of work. If work is harmful it must be due to the amount of work done, the way the work is done or the environment. The worker, because he works, ought to be the healthiest, the happiest individual in society. But he isn't. The laboring class as a class are the least healthy and efficient." Dr. Fisher emphasized with vigor that "health is purchasable; the death rate is attackable; efficiency has a physiologic basis; the new industrialism takes into account the physical element."

The new system of medical examination of employees and its results was described fully by Dr. Lawson Thornton, medical director of the American Cast Iron Pipe Co., Birmingham, Ala. Great increase in the efficiency of employees and in the reduction of accidents has followed this company's efforts. White and colored employees are given exactly the same attention in the elaborate plans carried out.

"The Acipco Medical Department," said he, "is trying to place the co-operative plan for medical and surgical service upon a high plane and to get as far away as possible from the methods of the so-called contract doctor of the past. It is the wish of the heads of the company, and the constant effort of the medical department, to give to the poorest and meanest patients as skilled, careful and kind attention as would be given to the richest man of the city. The funds received through the co-operative plan are not sufficient to give this high-class service. In order to work up every case as it should be, much time is required and several doctors and nurses are necessary. To this end the company supplements liberally whatever amounts are needed to carry on the work."

The education of the American workingman was discussed by Prof. H. Will Nelson of the Agricultural College of Mississippi, and Mr. E. O. Smith of the Newport News Shipbuilding Co., Newport News, Va.

Professor Nelson advocated equal attention to social uplift in all schemes of industrial education, and pleaded for the personal interest of foremen and higher officials as to the best means of stirring the ambitions of the rank and file of workmen.

Mr. Smith advocated adaptation of public school work to meet the industrial demands of given communities. His company pays tuition fees of all employees pursuing night school studies. He advocates special training of teachers for the work of instructing workmen at night, and said that the schools need the help and advice of experienced industrial workers before they will be of much assistance in industrial education.

It was brought out that 70 men are now giving full time to the work of the industrial Y. M. C. A.'s in the Southern States; that 42 buildings have been erected by Southern corporations, at a cost of \$615,000, for Y. M. C. A. welfare efforts alone. These corporations are



giving nearly \$50,000 annually toward the support of the work.

Other welfare work than that directed by the Y. M. C. A. was described and discussed. Miss Hattie E. Hylton, welfare director Riverside and Dan River Cotton Mills, Danville, Va., reviewed the work being done there, showing the value to and appreciation of uplift work by the employees.

Other speakers on the program were Mr. C. C. Robinson, Employed Boys' Secretary, International Y. M. C. A., New York, and Dr. E. H. T. Foster, International Industrial Secretary of Y. M. C. A.'s Charlotte, N. C.

There was a unanimous demand that the conference be made an annual event.

## Taking Advantage of a Lull to Build a New Plant

All during the period of business depression through which we were passing during the past year or so, the MANUFACTURERS RECORD has continuously emphasized the importance of manufacturers taking advantage of dull times to make improvements and extensions to their plants, so that they would be in a position to reap the full benefits of business revival.

That some far-seeing manufacturers have recognized

each, with spacious covered sheds in front and to the side facing the factory buildings. A new siding was run in from the Illinois Central Railroad, giving capacity for loading about 10 cars at one time.

The business for a few years increased so that it was impossible to go on with improvements that were more and more being sorely needed, but the war coming on last season, business commenced to get quite poor at



NEW PLANT OF THE GULLETT GIN CO., AMITE, LA.

The following companies were represented at the conference: Eastman-Gardiner Lumber Co., Laurel, Miss.; W. C. Arnold and F. C. Wilcoxson; Ware Shoals Manufacturing Co., Ware Shoals, S. C.; D. L. Allen; Wisconsin Steel Co., Benham, Ky.; F. R. Kennedy; Carbon Coal Co., Decota, W. Va.; B. C. Miller; Coosa Manufacturing Co., Piedmont, Ala.; A. R. Marwick and C. W. Turner; West Huntsville Cotton Mills, West Huntsville, Ala.; J. W. Bradley; West Huntsville Knitting Co., Huntsville, Ala.; W. F. Fanning; Abington Cotton Mills, Huntsville, Ala.; C. L. Orth; King-Ityder Lumber Co., Bon Ami, La.; R. R. Murray; Pond Creek Coal Co., McVeigh, Ky.; Luther Brown; Pond Creek Coal Co., Stone, Ky.; C. M. Summers; Riverside and Dan River Cotton Mills, Danville, Va.; Miss Hattie Hylton and Miss Rose L. Brimmer; Crossett Lumber Co., Crossett, Ark.; J. O. Hunnicutt; Wenonah Cotton Mills, Lexington, N. C.; W. E. Holt, Jr.; Erlanger Cotton Mills, Lexington, N. C.; J. M. Gamewell; W. R. Lynch, welfare director cotton mills, Spray, N. C.; American Cast Iron Pipe Co., Birmingham, Ala.; Dr. Lawson Thornton and A. J. Speer; Tennessee Copper Co., Ducktown, Tenn.; G. C. Suttles; Newport News Shipbuilding Co., Newport News, Va.; E. A. Smith; Cannon Manufacturing Co., Kannapolis, N. C.; H. W. Owen.

### Large Petroleum Imports by Great Britain.

The Petroleum Review of London, July 17, says that 20,000,000 gallons, approximately, of petroleum products were imported into the United Kingdom during the preceding week, this figure being 50 per cent. greater than the previous record for a like period. Of the total, America supplied four-fifths, and the rest, which consisted wholly of motor spirit, was from Eastern oil fields. The Anglo-American Oil Co. alone imported over 6,000,000 gallons. The tank steamer Narragansett arrived in the Thames with 2,500,000 gallons, one-half being illuminating oil, and the Comanche arrived with 2,000,000 from Texas, most of this cargo being motor spirit. The Lompoc also brought about 1,800,000 gallons of motor spirit for the Anglo-American Oil Co.; in fact, all the tankers arriving during the week in the Thames were for that corporation. At Bristol the tank steamer Pinna delivered more than 2,000,000 gallons of illuminating and gas oil from the United States for the British Petroleum Co. The provincial import trade of the Anglo-American Company has also been particularly active.

the wisdom of this idea is strikingly illustrated in the following letter received from the Gullett Gin Co. of Amite, La.:

"Our company took advantage of the lull in business to complete our plant as mapped out a few years ago.

"We built along modern and approved lines, a new brick machine shop, forge shop and foundry, thus greatly increasing our already excellent facilities. We also made improvements in our power-house and generally throughout our plant. Our plant now is one of the finest and most efficient in our line of manufacture."

One of the most interesting features in the improvements made was the fact that they were completed without a cent of mortgage being placed upon the plant and without increasing the capital stock of the company one dollar. The funds needed for the work represented the investment of the company's surplus, which had been set aside each year for further extension.

This company is one of the oldest manufacturers of cotton gins in the country. Its business was started in 1849 at Aberdeen, Miss., by Benjamin David Gullett. In 1869 the present plant was located at Gulletts, La., one mile south of Amite. Since the establishment of this business, nearly 70 years ago, it has continued to prosper.

About eight years ago the company decided that the needs of its growing business was such as to warrant it in building an entirely new plant to replace its old frame structures, some of which had been in constant use since the company moved to Gulletts, 46 years ago.

Plans for the new plant were drawn and several of the buildings were at once started. Each new building was erected without disturbing the going business and without a shutdown of any kind. In this manner the company built and equipped power-house, woodworking shop, carpenter shop, sheet-iron shop, finishing shop, material storage building, and installed a water-works system covering both inside and outside of the factory premises, with a standpipe holding 135,000 gallons of water.

After completing these improvements the company then laid out an immense lumber yard and placed a new drykiln, with necessary adjuncts, tracks, etc., to handle lumber, of which a great quantity is used, in such a manner as to give at the same time a minimum fire risk and a minimum expense of handling the lumber from yards through kiln into the woodworking shop.

The next proposition that was taken up was the improvement of facilities for warehousing and shipping the finished product. Following the plan mapped out at the start, two warehouses were built, 300x100 feet

once. The company decided that conditions would likely be bad for 12 months or so, but after a time they were bound to improve, and therefore decided as it was in business to stay no better time could be found to build the two main units of its new plant not yet touched, foundry and machine shops. So as soon as a fair stock had been put in the warehouses, which was done about December 15 last, production was stopped, the old foundry and machine shop torn down and the new ones, plans for which were all ready, were put under way, and as many of the company's employees as possible given work in the construction. These buildings are now complete, and in addition a fine entrance way, gatehouse, oilhouse, sand and coke houses and concrete casting bins, racks, etc., have been added.

The plant is now nearly completed as per original plans. It is entirely of brick, steel and concrete, with wood used only when it was best to do so. The buildings and yards cover 15 acres. Each shop has been painted white inside, is roomy, without posts, high roofs, and afford a maximum of light, air and comfort to employees. No effort was made to apply Northern methods to a Southern climate, but the buildings were designed to suit location and climate. They are all one story, and outside of hoist at foundry cupola there is not an elevator or stairway in the plant. These buildings are so placed that but one shop can be damaged or destroyed by one fire.

The present company's charter was taken out in 1883. The officers are: Adolph Katz of New Orleans, president (he is also president of the New Orleans National Bank, vice-president of the New Orleans Clearing-house and interested in many enterprises); E. H. Bostick, vice-president and general manager, and A. S. Cartwright, secretary, both of Amite. The company has offices in Atlanta, Memphis and Dallas.

### Opportunities for Industries.

H. M. Modisett, general manager of the St. Louis & Hannibal Railway Co., Hannibal, Mo., says that a local company has been organized and that electric current from the Keokuk Dam is now being furnished at New London, Center, Perry and Frankford, Mo., stations on this railroad within from 10 to 30 miles of Hannibal; also that, owing to the contract under which the current is supplied, the company is in a position to furnish power during daytime at a remarkably low figure, and there would seem to be good opportunities for small manufacturing concerns to locate in some of these towns. The railroad provides good train service.

## MINING

[A complete record of the new mining enterprises in the South will be found in the Construction Department.]

### Coal Production in West Virginia, Kentucky and Arkansas.

West Virginia broke all records in coal production in 1914, with an output of 71,707,626 short tons, valued at the mines at \$71,391,408. This was an increase of about half a million tons over the production in the previous banner year, 1913, according to C. E. Leshar of the United States Geological Survey. The State still maintained its position of second place among the coal-producing States. Decreases in production in some parts of West Virginia were more than offset by increased output in new areas, where during the last two or three years development has progressed rapidly and many new mines have been opened. Unfortunate strikes among the coal miners in Ohio also enabled West Virginia producers to capture, for the time being at least, markets normally supplied by Ohio. Seventeen counties in West Virginia recorded increases in coal mining, Logan county alone producing nearly 2,000,000 tons more than in 1913.

Arkansas produced 1,836,540 tons of coal in 1914, with a value at the mines of \$3,158,168. This shows a decrease from the production in 1913, which is attributed to a falling off in the demand for manufacturing purposes, due to demoralization in the cotton industry in the latter part of the year, and to the decrease in domestic consumption because of mild weather during the winter of 1914. These causes were sufficient to more than offset the slight increase in railroad consumption resulting from the inability of the Colorado mines, because of a strike, to supply fully the demand upon them.

A favorable aspect of the coal situation in Arkansas was the decrease in the quantity and percentage of coal shot off the solid, the amount thus mined in 1914 being 78 per cent. of the total as compared with 79.5 per cent. in 1913. The quantity of machine-mined coal was 19 per cent. of the total, and 3 per cent. was undercut by hand.

Kentucky, like West Virginia, broke its record of coal production, with an output for 1914 of 20,382,763 short tons, valued at the mines at \$20,852,463, the year's output exceeding the previous high mark in 1913 by 766,163 tons. The increase was all the more notable because it was made in a year when most of the coal fields of the country showed a decrease, and it was due to activity in coal-mining in the eastern part of the State, particularly along the Virginia border, and to the construction of new railroads.

The number of men employed increased from 26,332 in 1913 to 28,764 in 1914. The average daily production per man also increased from 3.5 tons in 1913 to 3.8 in 1914, the increase being due to the extended use of mining machines.

### To Mine Alabama Mica.

Mica in Tallapoosa and Jefferson counties, Alabama, will be developed by the Tallapoosa Mica Co., Dadeville, Ala., which is being organized with \$50,000 capital. Details are now being considered, and it is reported that an investment of several hundred thousand dollars will be provided for in the plans for the ultimate development of the property. The company's organizers are A. T. McCormick, W. L. Shumate, A. P. Smith and I. E. Boyette, all of Birmingham, Ala., and E. T. Childers of Arcadia, Fla.

### Alabama Coal Mining Increasing.

The producing capacity of coal mines in Alabama under normal conditions has been developed to about 22,000,000 tons per annum, according to the annual report of C. H. Nesbitt, chief mine inspector, which has just been published. Although the production of coal in the State last year was only 15,525,903 tons, a decrease of 2,281,381 tons as compared with 1913, this year is expected to show a great increase because of the opening

of the Warrior River to coal transportation and the development of new mines. There were seven new mines opened in 1914, and a total of 263 mines in operation.

### Coal Out of Hampton Roads.

During June there were 608,599 tons of coal exported from Hampton Roads, Va. (Newport News and Norfolk), of which 244,655 tons went to Italy, 102,970 tons to Brazil, 47,708 tons to Panama, 28,229 tons to Cuba, 26,947 tons to Argentina, 18,589 tons to France, 14,026 tons to Barbados, 13,638 tons to Spain and 12,290 tons to Trinidad, etc.

### West Virginia Coal Mining Record.

Coal production in West Virginia during the year 1914 totaled 71,707,626 short tons, an increase of about 500,000 tons as compared with 1913, which was the previous big year in that State. The value of the coal at the mines was estimated at \$71,391,408.

### A \$1,370,000 Iron Corporation.

The Texas City Co. of Texas City, Tex., has been incorporated with a capitalization of \$1,370,000 for the purpose of developing the iron mining and manufacturing industry in Texas. Hugh B. Moore and Harvey C. Thomas of Texas City and Augustus B. Wolvin of Duluth, Minn., are the incorporators.

## FOREIGN NEEDS

Machinery and equipment wanted abroad are mentioned in many letters received by the MANUFACTURERS RECORD, which is so widely read in foreign countries that we are in constant receipt of many letters from all parts of the world. For the benefit of our subscribers seeking foreign trade we publish the following extracts from recent letters:

### Cement, Wallpaper, Papier Mache, Etc.

Abram de Sola, P. O. Box No. 95, Curacao, D. W. I.: "Put me in connection with reliable manufacturers of wallpapers, for I am in view to place a regular order with some of my clients. If these manufacturers are inclined to send samples, please recommend them to do so, for it will put me in a more favorable chance to secure these orders. On account of the present war we cannot bring Portland cement from Germany, and as there is favorable chance to make some sales of American cement, I request you to please recommend manufacturers to send their prices f. o. b. steamers New York for barrels of 180 kos., good and strong barrels with iron hoops. Please let me have catalogues for gilded cornices, for doors and windows, with prices and discounts. Also catalogues of papier mache ornaments or of any other paste to put in the center of the ceilings of parlors, etc. We used to import these from France and Germany."

### Electric Laundry Machinery.

D. Lichatscheff, 6th Station, Odessa, Russia: "Kindly have following request handed over to interested firm. Wanted latest catalogue of laundry machinery, to contain at a time 400 pieces of washing; motor electric; lowest price solicited."

### From Portuguese West Africa.

M. De Mesquita, Benguela, Portuguese, West Africa: "We handle stationary, writing machines and so on; we publish the Jornal de Benguela, and have correspondents throughout this colony, Portugal, Hamburg, New York, Liverpool and so on. This district exports rubber, wax, palm oil, sugar, meat of different kinds, fish, cotton, whale oil, guano, cereals, grain of different kinds, rice, wheat and so on. These and similar products we can supply in large quantities. We import con-

serve, shoes, building materials, machinery, automobiles, motors of different kinds, bicycles, vehicles of different kinds, horses and mules, hardware, ready-made clothing, cloth and woven goods, paper, drugs, mineral waters, pharmaceutical specialties, soaps, perfumery, sugar, firearms, etc."

### For Brazilian Trade.

J. Castro Motta, successor to Motta & Irmo, Ceara, Brazil:

"I do not desire to get isolated agencies for manufacturers of specialties, unless the article is worthy and can command a considerable sale. I prefer to act as agent for two or three commission houses which include products of North America that command a ready sale in Brazil. The agency could embrace all the Northern States of this country, such as Parahyba, Ceara, Rio Grande, do Norte, Maranhao, Para e Manaus. It is probable that as soon as the European war is concluded I shall be able to sell other products which do not interest me at present. If not able to address me in Portuguese, use French or Spanish."

### Various Manufactures Wanted.

Gerhard & Hey, international freight contractors, 21 State street, New York:

"Kindly publish in your wants that International Import Office, P. Maelfeyt & Co., Paparigopoulos street, Athens, Greece, are interested in cast-iron and steel pipes for water, gas and steam; electric supplies, wire, lamps, etc.; house and kitchen stoves; iron, copper and brass bedsteads; safes; household articles; glass and porcelain ware; crystal articles. Send catalogues and samples, advising Gerhard & Hey when same has been done."

### Cast-Iron Piping.

Hugh Girvan, 120 Cannon street, London, E. C., England:

"Put me in touch with iron foundries that will make cast-iron drain water pipes for English and general foreign markets. Sizes principally used are 2, 2½, 3 and 4-inch diameter, measured inside to out; 6 feet long, including socket, and 16, 20, 23 and 32 pounds per link. A large business can be done. I know the trade both as a manufacturer and a merchant."

### Pencils and Pencil Machinery.

M. Sheremetewsky, mechanical engineer, 25 Old Basmanow street, Moscow, Russia:

"Write to some good pencil manufacturers asking them to send copies of catalogues and to give net export prices for pencils made in United States. Be kind enough and write to manufacturers of machines used in pencil works for them to forward me detailed information regarding the machinery. All the correspondence must be registered on account of war."

### For Colombia's Children.

Faillace Hermanos, Apartado No. 66, Barranquilla, Colombia:

"We are interested in dealing and handling articles of American manufacture for boys and girls. Particularly interested in velocipedes, bicycles, little wagons, wooden carryalls, military uniforms for boys, little swords and sabers, air guns and supplies, revolvers, toys, etc., for boys and girls, but not tin articles."

### Coal, Flour and Staves.

J. F. Paquet, former vice-consul of United States at Paris, care L. S. Burchard, 2 Rector street, New York:

"Seeking to purchase from manufacturers direct, for French interests, large quantities of hardwood staves for wine casks to save present French wine crop; also in market for large tonnages of coal and flour."



# GOOD ROADS AND STREETS

## SOUTHERN HIGHWAY ACTIVITIES.

### Details of Week's Progress in Improvements in City and Country.

Further details of road and street undertakings and bond issues mentioned below are given under the headings Construction Department and New Securities, published elsewhere in this issue.

The MANUFACTURERS RECORD invites from its readers information about road and street work projected or under way, photographs of good roads and discussions of matters pertaining to the betterment of the highways of the South.

#### Bonds Voted.

Cloverdale, Ala.—City voted \$30,000 bonds to improve streets, etc.

Jackson, Miss.—Hinds county, Second District, voted \$15,000 bonds to construct roads.

Port Lavaca, Tex.—City voted \$17,000 bonds to improve streets.

#### Bonds to Be Voted.

Hinton, W. Va.—Summers county, Talcott District, votes August 23 on \$100,000 bonds to construct roads, etc.

Hinton, W. Va.—Summers county, Greenbrier District, votes August 23 on \$150,000 bonds to construct roads, etc.

Fort Myers, Fla.—Lee county votes September 10 on \$350,000 bonds for road construction.

#### Contracts Awarded.

Amite, La.—Tangipahoa parish awarded contract to construct 19 miles of dirt roads.

Bryson City, N. C.—Swain county awarded contract to construct 11 miles of road.

Corpus Christi, Tex.—City awarded contract for 88,000 square yards of bitulithic pavement; cost \$257,000.

Hartford, Ky.—Ohio county awarded contract to construct 3 1/4 miles of macadam road; cost about \$20,000.

Huntington, W. Va.—Cabell county awarded contracts to grade five or six miles of road; cost about \$15,000.

Miami, Fla.—Ocean Beach Co. awarded contract to pave two miles of streets with coralline rock from Miami Canal.

Tuscaloosa, Ala.—Tuscaloosa county awarded \$17,564.12 contract to construct 4 1/2 miles of State-aid road.

Washington, D. C.—District Commissioners awarded contract for 7700 square yards of granite block paving.

Westminster, Md.—City awarded \$11,695 contract for 1.46 miles of State-aid highway.

#### Contracts to Be Awarded.

Benton, Ark.—City will grade 30 blocks of streets; cost \$2000.

Clarksdale, Miss.—City receives bids until August 10 for street improvements; 9000 linear feet combined curb and gutter, 1000 square feet driveway and 1200 square feet concrete walk.

Durham, N. C.—City receives bids until August 6 to construct about 3000 square yards of pavement.

Fort Meade, Fla.—City receives bids until August 17 to pave 30,000 square yards of streets; vitrified brick, asphaltic concrete, bitulithic or other pavement, complete with curbs, gutters and drainage.

Geneva, Ala.—Geneva county will grade, drain and surface with sand-clay part of Hartford and Wicksburg road; expenditure \$4616.26.

Kingstree, S. C.—City will construct about 700 square yards paving; cost \$600.

Lampasas, Tex.—City will construct eight miles of sidewalks.

Leesburg, Ga.—Lee county will construct 15 miles of road.

Linden, Ala.—Marengo county receives bids until August 9 to construct gravel and clay roads; \$120,000 appropriated.

Louisville, Ky.—City will pave six blocks with asphalt; estimated cost \$28,500.

Memphis, Tenn.—City will pave portion of street with wood block; estimated cost \$30,000.

Palmyra, Mo.—Marion county will expend \$7000 on 1 3/4 miles of river road improvements.

Poplar Bluff, Mo.—City receives bids until August 16 to construct 6500 square yards concrete pavement with Dolarway wearing surface; estimated cost \$9618.

Okmulgee, Okla.—City will construct 55 blocks of concrete paving.

Seguin, Tex.—Guadalupe County Road District No. 2 received bids until August 2 to construct two gravel roads.

Southern Pines, N. C.—City receives bids until August 14 to construct 2000 square yards of granolithic sidewalks.

Spring Hill, Tenn.—City opens bids August 7 to make street improvements costing from \$9000 to \$12,000.

Thomasville, Ala.—Clarke county receives bids until August 31 to grade, drain and surface with sand-clay part of Thomasville, Linden and Selma roads; expenditure \$15,579.26.

Town Creek, Ala.—Lawrence county will construct two miles of macadam road.

Williamsburg, Ky.—Whitley county receives bids until August 9 to construct 18 miles of road.

### Pan-American Road Congress Program.

The advance program of the Pan-American Road Congress outlines the work to be followed at the 10 sessions, which will be held at the Municipal Auditorium, Oakland, Cal., from the morning of Monday, September 13, until the afternoon of Friday, September 17.

The first session, Monday morning, will be taken up by the opening exercises. The opening address will be by Governor Gates of Vermont, chairman of the executive committee. Addresses of welcome will be made by Governor Johnson of California, Mayor Davis of Oakland and Director of Congresses James A. Barr of the Panama-Pacific Exposition. Responses will be made by President Tillson of the American Road Builders' Association and President Harrison of the American Highway Association.

Six educational addresses are scheduled for Monday afternoon. Both morning and afternoon sessions on Tuesday, Wednesday and Thursday, and that of Friday forenoon, will be devoted to the presentation and discussion of papers for bringing out the latest and most approved ideas in road and street construction and maintenance. Friday afternoon will be given to committee reports, business and resolutions.

Chairman Gates will be assisted by the following-named persons, who will preside at various sessions of the congress: Fairfax Harrison, president American Highway Association; George W. Tillson, president American Road Builders' Association; Capt. Walter Coggeshall, president Tri-State Good Roads Association; W. A. McLean, chief engineer Ontario highways; Judge W. S. Worden, treasurer Tri-State Good Roads Association; James H. MacDonald of Connecticut, and W. D. Sohler, chairman, Massachusetts Highway Commission.

The program schedules 21 papers open to discussion. They have been prepared and the discussions will be led by men well known in road-building circles, and the committee has endeavored, so far as possible, to assign to each the subject which is within the scope of his greatest activity. In this way the most complete information may be brought out. After the paper on any subject has been presented and the discussion opened by the person selected, remarks will be in order by anyone interested in the subject.

Acceptances of the subjects assigned by the program committee have already been received from about 40 of those designated, and others are constantly being received. These acceptances cover practically all phases of road and street construction, maintenance and administration.

This congress is being held under the auspices of the American Road Builders' Association and the American Highway Association, acting jointly. These two great bodies formerly held separate conventions. Co-operating with them for this meeting are the Tri-State Good Roads Association and the Pacific Highway Association. The Pacific Highway Association changed the date of its annual convention to September 16 at San Francisco

in order that its members may participate in the work of the Pan-American Road Congress.

The executive committee of the congress consists of Governor Charles W. Gates of Vermont, chairman, Franklin, Vt.; Major W. W. Crosby, program, Munsey Building, Baltimore, Md.; James H. MacDonald, finance, New Haven, Conn.; J. E. Pennybacker, arrangements, Willard Building, Washington, D. C., and E. L. Powers, publicity, 150 Nassau street, New York.

### Conference on Concrete Road Building.

The organization of subcommittees for the Second National Conference on Concrete Road Building, to be held in Chicago February 15, 16, 17 and 18, 1916, has been completed. Seventeen committees have been named, each to investigate and submit a report upon a specific topic in connection with the construction of concrete roads. The committees are made up of college and university professors, State, city and county authorities, engineers and contractors.

The advisory committee has again elected Dr. W. F. M. Goss, Dean of the College of Engineering of the University of Illinois, as chairman, and J. P. Beck as secretary.

The program for the second conference will follow the general lines worked out so successfully for the first meeting with a few changes dictated by new conditions.

An invitation is extended to all interested in highway improvements to correspond with the secretary and to attend and participate in the conference.

The secretary's office is at 208 S. La Salle street, Chicago.

### Increase of Brick Roads Predicted.

A rapid increase in the mileage of vitrified brick roads in this country is predicted in a new bulletin, No. 246, of the United States Department of Agriculture. Some of the features of the bulletin are outlined in following extracts from official announcement of the bulletin. Such roads, it is said, possess three distinct advantages. First, they are durable under all traffic conditions; second, they afford easy traction and moderately good foothold for horses, and third, they are easy to maintain and keep clean. On the other hand, they are unquestionably expensive to construct and the effort to reduce the high first cost frequently results in inferior construction and consequent defects.

The cost of a brick pavement depends so much upon so many variable factors, such as the locality, freight rates and the distance from brick kilns that it is not possible to make any definite estimates. The cost of the rough grading, however, should be considered entirely apart from the cost of the pavement, for the grading would have to be done no matter what kind of a road was to be built.

Paving bricks should be uniform in size, reasonably perfect in shape, tough in order to resist crushing, hard in order to resist abrasion, and uniformly graded in order that the pavement may wear evenly.

In drawing up specifications for the brick to be used on any road, it is desirable to specify the minimum as well as the maximum loss of weight which a sample may sustain in order to prevent too great a difference between the softest brick that is acceptable and the hardest that may be supplied.

Equally important with the character of the brick is the character of the roadbed on which it is to be laid. The four essentials for the roadbed are thorough drainage, firmness, uniformity in grade and cross-section and adequate shoulders.

Strong, durable curbing is necessary for all brick pavements in order to prevent the marginal brick from becoming displaced, which would result in deterioration, finally spreading over the entire pavement. Properly constructed curbing, on the other hand, holds the bricks together and enables them to present a combined resistance. Portland cement and stone are probably the best materials to use.

One of the most essential factors of a brick pavement is a firm foundation upon which to lay the brick. The importance of this is evident when one considers that the ability of pavement to resist wear depends upon the smoothness of the pavement and a firm foundation. If the foundation is poor, one of the bricks may be easily forced down, causing unevenness in the surface. Where

the traffic is comparatively light and the subgrade composed of material that does not readily absorb water, broken stone may make a satisfactory base. For heavier traffic, or where the material composing the subgrade is at all unstable, a concrete base is necessary. Above the concrete base a sand cushion to correct slight irregularities and to secure an even surface for the brick is most desirable.

After the brick have been laid upon this cushion and the pavement gone over carefully to remedy all defects and to remove all imperfect material, it should be rolled with a heavy power roller, gone over carefully once more, and the joints then filled with some material to prevent the brick edges from chipping.

Of the various materials used for this purpose, a grout made of equal portions of Portland cement and sand mixed with water is recommended. Sand alone is sometimes used because of its cheapness, but it is open to several objections, and its use in the end is probably not economical. Portland cement grout, on the other hand, binds the individual bricks together and converts the pavement into what is practically a monolith.

In addition to the description of the various problems, the new bulletin contains in an appendix complete typical specifications for the construction of a brick road.

### Jackson Highway Association.

At a recent meeting in Birmingham, Ala., the Jackson Highway Association was formally organized to promote the construction of a Lakes-to-the-Gulf National Highway, extending from Chicago and Buffalo on the north to New Orleans on the south.

The association has been named in honor of Andrew Jackson. It was decided to hold a mass-meeting in September or October at some city to be selected later.

Officers elected as follows:

President—P. L. Atherton, Louisville, Ky.

Vice-Presidents—Alabama, W. S. Keller, Montgomery; John Craft, Mobile.

Kentucky—Emory G. Dent, Allen county, and E. L. Quarles, Lexington.

Indiana—Walter H. Crim, Selma.

Mississippi—F. E. Cottrell, Gulfport, and Walter Gex, Bay St. Louis.

Tennessee—J. G. Creveling, Nashville, and Ben Childers, Pulaski.

Louisiana—Leon Schwarz and C. H. Elis, New Orleans.

### Specifying and Using Patented Pavements.

Under the title of "Specifying and Adopting Specifications for Patented Pavements and the Method of Calling for Bids Thereon," there has been published in pamphlet form a thesis, prepared by M. T. Calef, road engineer, Roemac road department, Philadelphia Quartz Co., Philadelphia.

In order to obtain all data possible on this subject, letters of inquiry were sent to highway departments of each State, to engineers, the technical press and a number of men prominent in highway engineering profession. A synopsis of all of the answers received is contained in the booklet, thus giving a concise outline of how the question is handled by different States and counties throughout the country.

A few copies of this booklet are available for distribution among engineers interested in highway construction, and these can be obtained by addressing Roemac Road Department, Philadelphia Quartz Co., 121 S. 3d street, Philadelphia, Pa.

### Big Road Plans in East Tennessee.

Seven counties in East Tennessee authorized during the past month a total of \$1,624,000 for the construction of modern roadways, and it is estimated that additional appropriations for highway improvement in East Tennessee will bring the full total to approximately \$2,500,000.

The counties voting the above funds include Claiborne, Scott, Blount, Carter, Sullivan, Hancock and Union. These counties have also spent large sums in the past, and with the completion of the work proposed East Ten-

nessee will have one of the finest systems of connected roads in the country.

The counties are co-operating in the work and are so laying out the roads that they will join one another at different county lines, thus affording continuous highways through the eastern part of the State.

### 150-Mile Road Built in a Day.

With 10,000 men contributing their services, together with 5000 teams, the people of West Tennessee last week practically completed 150 miles of highway between Paducah, Ky., and Memphis, Tenn., in one day.

Men in every walk of life were engaged in the work, from leading public officials down to the humblest laborer. Governor Rye of Tennessee, accompanied by President John Howe Peyton of the Nashville, Chattanooga and St. Louis Railway, toured along the line of construction work to encourage the citizens in their volunteer effort.

By evening the roadway for its entire distance of 150 miles was practically completed in its most important details, leaving some few finishing touches, which were completed the next day.

## LUMBER

[A complete record of new mills and building operations in the South will be found in the Construction Department.]

### Silicate of Soda for Sap Staining in Lumber.

In a letter to the MANUFACTURERS RECORD the Philadelphia Quartz Co. of Philadelphia calls attention to certain results that have been secured in the use of silicate of soda as a preventive for the staining of lumber.

It is noted that in certain localities in the summer time, during damp, hot weather, the fungus grows on lumber shortly after it is stacked, and this causes staining. Boring insects also damage the stacked wood in various localities in the summer.

In reference to the use of silicate of soda by one of the Southern lumber plants to overcome this the company states:

"The Carrier Lumber Co. of Sardis, Miss., during the summer of 1913 used a solution of six barrels of 'N' brand silicate of soda and 34 barrels of water (8° Be.) at about 125° temperature in which to dip their lumber. This treated about 60,000 feet of lumber. When examined in the spring this was in much better condition than that which had been dipped in bicarbonate of soda. Not being convinced as to the advisability of using silicate on all their lumber, they repeated the test the following year, and reported that the condition of the lumber thus treated 'was the best they ever had,' and although the silicate solution costs more to begin with, it kept the treated wood in such fine condition as to be most economical."

The following advantages are set forth by the company covering the use of silicate of soda for lumber staining:

First. Reduces the loss of lumber due to staining and protects the wood from boring insects, thus reducing the manufacturing cost.

Second. The silicate does not penetrate into the wood, but remains concentrated on the surface where it is required.

Third. Once dried, the silicate is very hard to redissolve, thus continuing to protect the lumber from insects, etc., after months of weathering.

Fourth. It is liquid and easy to prepare in the dip.

Fifth. It has no damaging corrosive effect on the wood; in fact, it does not damage the wood in any way.

### \$250,000 Lumber Company Formed.

Organization has been effected by the Black River Cypress Co., Sardinia, S. C., recently incorporated with a capitalization of \$250,000. Officers have been elected as follows: C. P. Goble, president; H. W. Hewes, vice-president; A. G. Gearheard, secretary; L. W. Gilbert, treasurer. Plans are being considered for timber land developments and lumber manufacturing.

## RAILROADS

[A complete record of all new railroad building in the South will be found in the Construction Department.]

### MORE INTERLOCKING PLANTS.

#### Southern Railway Provides Means at Three Points for "Safety First."

In addition to the automatic signals which the Southern Railway will install in connection with the new double track line a large interlocking plant will be erected at Charlottesville, Va. The plant will be of mechanical type with power-home and distant signals and will protect the crossing of the Southern Railway and the Chesapeake & Ohio Railway. It will have electric locks and annunciators, to notify operators of approaching trains, and also 48 levers. This will do much to facilitate the movement of trains of both roads through Charlottesville and it will moreover make collisions impossible.

At Danville, Va., on the same line, in addition to the automatic signal system being installed, the Southern will construct a large mechanical interlocking plant to protect the crossing of the new main line of the Danville division with the Richmond division, which will continue in use to serve the Danville freight terminal. The plant will provide for the operation of the connecting track switches and the switches at the end of the Richmond line and will be of the latest type. It will be provided with power-home and distant signals, electric locks and annunciators to notify operators of approaching trains and will have a total of 40 levers.

Another mechanical interlocking plant on the Southern Railway is being installed where the Edisto River Lumber Co.'s railway crosses the line of the Charleston division at Embree near Branchville, S. C. This plant will be so arranged that the signals will stand normally in the proceed position for trains of the Southern Railway and with the derails and the signals set against the trains of the lumber road. By installing this plant the Southern will eliminate the necessity for stopping its trains at Embree and will also provide additional safety.

### WESTERN MARYLAND'S YEAR.

#### Nearly \$2,000,000 Increase in Operating Income—Large Economies Effected.

The Western Maryland Railway Co.'s statement of earnings and expenses for its fiscal year ended June 30 shows total revenues of \$8,683,458, increase as compared with the next preceding year \$415,722; total expenses \$6,257,412, decrease \$1,591,218; net revenues \$2,426,046, increase \$2,006,941; operating income after taxes \$2,120,046, increase \$1,964,145.

It will be observed that the savings in the cost of conducting business were very large, the greatest saving being in the transportation department, where \$3,056,078 was spent, or \$770,345 less than last year. Maintenance of equipment also displays a considerable reduction, the expenditure being \$1,479,331, or \$416,783 less. Expenditures for maintenance of way were \$1,204,048, or \$393,666 less. Had not taxes increased, being \$306,000, or \$42,795 more, the operating income would have been more than \$2,000,000 greater than last year. As it was, it is within \$36,000 of showing that amount of gain.

The statement for the month of June shows revenues \$844,482, increase as compared with the same month of last year \$133,334; expenses \$548,286, decrease \$190,411; net revenues \$296,196, increase \$323,745; operating income after taxes \$269,196, increase \$311,850.

### New Trackage Agreement.

A report from Fort Worth, Tex., says that the Missouri, Oklahoma & Gulf Railroad has closed an agreement with the Houston & Texas Central Railroad and the St. Louis & Southwestern Railway under which its trains will run from Denison via Plano to Fort Worth using the St. Louis Southwestern's new terminals at the latter place.



## PENNSYLVANIA SYSTEM EARNINGS.

**Half-Year Shows Gross Over \$164,000,000—  
Income Now Improving.**

The Pennsylvania Railroad system reports for June gross earnings of \$31,609,836, an increase of \$631,340 as compared with June of last year, and, in view of the fact that May showed an increase of \$52,879, it is believed that the gross will continue to display monthly gains. The net earnings for June were \$8,456,563, an increase of \$1,041,540.

For the six months ended June 30 the gross earnings were \$164,779,708, a decrease of \$5,852,504 from the corresponding period of last year, and the net earnings were \$28,749,315, an increase of \$2,102,089, a saving of about \$7,954,000 having been accomplished in operating expenses.

The Pennsylvania has been authorized by the Maryland Public Service Commission to issue a blanket mortgage upon the Northern Central Railway, which it leases, and it is expected that the cost of the proposed extensive terminal improvements at Baltimore will be defrayed by a bond issue of several millions of dollars whenever the railroad company and the city authorities reach an agreement concerning the construction plans. This general mortgage may be quite large with the provision to issue under it bonds as required for improvements over a number of years.

In New Jersey the railroad company has obtained the approval of another mortgage, this for \$65,000,000, and the bonds thereunder are to be for improvements, etc., in that State.

## CROPS ALONG THE SEABOARD.

**President Harahan Optimistic—Big Meeting  
of Officers and Employees.**

President W. J. Harahan of the Seaboard Air Line, who recently returned from Savannah, where he attended the large meeting of officers and employees of the system, says that he is much pleased with the crop outlook in the territory traversed by the lines of his company. All crops are generally in fine condition, and indications are that there will be a material increase in the gross earnings of the system during the current year.

Mr. Harahan was the principal speaker at the Savannah meeting, which was for the purpose of bringing together as many of the officers and employees as could attend, it being planned to give expression to the appreciation which the company itself felt for all of them and to establish a clear comprehension among all of its policy and aims. He emphasized the necessity for everyone to pull together as they had been doing for the company's success and to leave no opportunity pass which could be turned to account for the best.

It is estimated that about 2000 persons attended, many of the visitors being accompanied by their wives and children. Various excursions and entertainments were provided. A dinner was given at Tybee.

## SOUTHERN RAILWAY'S FIGURES.

**Gross Earnings Over \$62,000,000 for the  
Year—Net for June Shows Increase.**

The statement of the Southern Railway Co. for its fiscal year ended June 30 shows gross revenue \$62,199,510, decrease as compared with the previous year \$8,551,487; operating expenses, taxes and uncollectible railway revenue \$48,799,455, decrease \$5,640,584; operating income \$13,400,055, decrease \$2,910,903.

The figures for the month of June were gross revenue \$4,743,500, decrease as compared with the same month of last year \$488,840; operating expenses, taxes and uncollectible railway revenue \$3,604,125, decrease \$855,103; operating income \$1,139,435, increase \$366,263.

During the month there was spent in addition to the operating expenses \$529,718.85 for improvements to the roadway and structures, an increase of \$150,006.37 over June, 1914.

For the fiscal year there was spent for improvements to roadway and structures \$8,970,965.50, or an increase of \$6,000,277.41 as compared with the preceding year,

notwithstanding the decrease in the operating revenue and operating income.

The operating income as shown in the statements represents the amount remaining after the payment of only those expenses incurred in the actual operation of the railway and of taxes; it takes no account of hire of equipment, rental of leased lines, terminals and other facilities and interest on the funded debt, all of which costs are charged against operating income.

A report from New York says that the Southern Railway has no maturing obligations until after January 1 next, when \$2,000,000 of the underlying bonds will come due, and they will be taken up with consolidated 3 per cent. bonds. The \$5,000,000 of notes maturing February 1 will also be taken care of. The double-tracking of the main line is being continued, as was lately stated in connection with the sale of \$3,500,000 of Atlanta & Charlotte Air Line 5s.

## Proposes to Build a Short Line.

A. C. Veach, Gravette, Ark., says that he will build, own and operate the proposed railroad from Melbourne, Ark., to a connection with the St. Louis, Iron Mountain & Southern Railroad of the Missouri Pacific system. The line will require 12 bridges, with spans from 20 to 30 feet long. It will traverse a valley opening up a very rich farming, stock-raising and fruit-growing country. Some minerals have been found in what are considered to be paying quantities. Assistance may be needed in financing the road. It is proposed to use a motor car for passenger service and other light traffic, while steam motive power will be employed for heavy work. Rails will be from 60 to 80 pounds per yard, and may be bought second-hand if in good condition.

## Now the Monongahela Railway.

Formal announcement is made at Fairmont, Morgantown and other points in West Virginia that the Buckhannon & Northern Railroad has been consolidated with the Monongahela Railroad, and that the two will now be known as the Monongahela Railway. The Buckhannon & Northern, which is owned by the Pennsylvania Railroad and the New York Central lines, recently built an extension of five miles to Fairmont, W. Va. It has also built to Westover, across the river from Morgantown, the track being in and a temporary station erected. Considerable coal land is in the vicinity of Westover.

## Atlantic Coast Line.

Atlantic Coast Line reports for June total operating revenue \$2,322,634.90, decrease as compared with the same month of last year \$528,436.92; operating income after deducting operating expenses and taxes \$411,449.97, decrease \$64,404.71.

For the fiscal year ended June 30, total operating revenues \$31,433,050.06, decrease \$5,399,847.54; operating expenses and taxes \$24,427,800.50, decrease \$3,345,446.46; operating income \$7,005,249.56, decrease \$2,054,401.08.

## New Equipment, Etc.

Atlantic Coast Line is contemplating the purchase of 800 box cars.

Chesapeake & Ohio Railway is getting the first deliveries on its late order for 100 refrigerator cars.

International & Great Northern Railroad will buy 3 chair cars and 2 regular passenger cars.

Western Maryland Railway is expected to make some additions to its freight equipment.

Corpus Christi & Wards Island Railway, Corpus Christi, Tex., may purchase an electric storage battery locomotive for freight service.

The Baltimore & Ohio Railroad transported during the month of June, 1915, a total of 2,883,957 tons of coal, an increase of 503,164 tons as compared with June, 1914. The coke hauled during the same month was 329,130 tons, an increase of 30,893 tons as compared with June of last year. Coal exports from Baltimore continue to be unusually large.

## SEABOARD AIR LINE'S PROGRESS.

**Gross Earnings, Almost Doubled in Ten Years,  
Show Growth of South.**

The Seaboard Air Line reports for its fiscal year ended June 30 total operating revenue \$21,280,462, decrease as compared with the previous year \$4,140,949; operating income \$5,286,778, decrease \$1,671,018.

For the month of June the figures are: Total operating revenue \$1,628,735, decrease \$324,498; operating income \$396,774, decrease \$155,004.

It is pointed out that while the increase in the mileage of the Seaboard lines since 1904 has been little more than 18 per cent., or from 2610 miles to 3084 miles, its gross revenues rose from \$12,750,000 in 1904 to \$25,291,000 in 1914, an increase of over 98½ per cent. Even since 1909 the increase in gross was considerably more than 43½ per cent. This indicates development of the company. There was great growth in fruit, vegetables, phosphate and coal freights.

## An Official Change.

A report from Wheeling, W. Va., says that A. N. Dutton, vice-president and general manager of the West Virginia Traction & Electric Co., has retired and is succeeded by R. D. Jeninson of New York, representing W. S. Barstow & Co., Inc., 50 Pine street, New York. Mr. Dutton will now devote himself to the further development of an industrial enterprise in which he is interested, and which is said to have expanded rapidly as a result of the war.

## Coal-Loading Record Broken on the C. & O.

The Chesapeake & Ohio Railway, according to a report from Huntington, W. Va., broke its record for coal-loading in July with a total of 2,224,020 tons, which was 7560 tons greater than the previous record, established in August, 1914. The total loading for the fiscal year ended June 30, 1915, was 22,763,740 tons, an increase of 1,961,640 tons as compared with the previous year.

## Prosperity Through Diversification in a Mississippi County.

Letter from W. A. Everman, Greenville, Miss., states that the Chamber of Commerce of Greenville has called on C. A. Cobb, representing the United States Agricultural Department, for suggestions as to ways and means of handling the enormous corn crop which Washington county, Mississippi, has raised this year. "Nor is this all," he continues, "that our farmers have done this season. The third cutting of alfalfa has been made, averaging over three tons per acre of dry hay, worth \$45. Wheat and oats have been harvested, the stubble plowed under and ground planted in corn that is now waist high, two crops in one year on same ground."

## To Build Another Steel Furnace.

Another open-hearth steel furnace will be built at Cumberland, Md., by the N. & G. Taylor Company of Philadelphia. Details are being determined by the company's own staff, and the engineering will probably be by the Fortner-Miller Engineering Co., Pittsburgh, in charge of previous construction for the Taylor plant. The Belmont Iron Works, Philadelphia, will be in charge of steel building construction. Daily capacity of furnaces 25 tons each. Present annual output of Taylor company 36,000 tons.

## Seeking Location for Factory.

The Union Iron Co., 135 Ninth avenue North, Nashville, Tenn., owning the patent rights and patterns of a double heating grate and hygienic heater, is seeking a location for a manufacturing plant. This company has an authorized capital of \$100,000, and G. B. Chapman, its assistant secretary, is prepared to correspond with organizations interested in securing the establishment of manufacturing enterprises.

## MECHANICAL

Illustrations and descriptions having news value pertaining to developments in machinery, mechanical devices and inventions will be considered for use in this department.

### Lawler Flat Bottom Bag.

An improved flat-bottom bag or sack for oilcake, cottonseed and all other grain products has been patented by John J. Lawler, and is now being placed on the market by Edward Jumonville, sales agent, 326 Camp street, New Orleans, La. Essential feature of the Lawler bag is its flat square bottom.

Hand-holds or ears facilitate the handling of bags when packed with any kind of product. The hand-holds do away with the use of steel hooks, which cause considerable loss of product (particularly when the same is flour, corn, oats, rice, grain of any character, etc.), out of which, in turn, arise numerous claims for shortage in weight filed against shippers and transportation companies.

Lawler bags can be stacked in any place, whether warehouse, steamer hold, freight cars, or anywhere assembled, so as to use all available space, thus effecting saving in transportation and storage charges, which are generally predicated on space occupied. The square bottom makes it practicable to stack these bags one on top of another, like square wooden boxes. The square bottom also admits of stenciling, trademark of shipper, etc., obviating the necessity for turning bags over to determine where they are going, or of tagging them separately so as to give this information. When Lawler bags are stenciled on their bottoms and stacked in rooms, the destination of the entire shipment can be told at a glance.

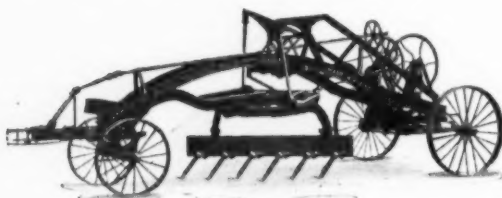
Entire contents can be discharged without the bag having to be shaken so as to relieve corners of loose products. The flat bottom further facilitates packing, especially in packing oilcake. The bottom being already laid, it is not necessary to pack the product so as to form a foundation on which to rest the balance of the contents of the bag.

Correspondence is invited by manufacturers desiring to manufacture, use or sell the Lawler type bag, or by users wishing to be furnished the Lawler bag, and any others interested in this new and modern facility for better packing.

### Road-Making Machinery.

Two of the latest additions to the line of earth-handling and road-making machinery manufactured by the Austin-Western Road Machinery Co., 910 South Michigan avenue, Chicago, Ill., are the Austin road-ripper and the Western No. 10 traction-engine grader, which are shown in the accompanying illustrations.

The new Austin road-ripper is an improvement on other types of this same machine. It is a massive scarifier attachment and is built for that purpose. When hauled by a traction engine of sufficient power, old, rutted and raveled roads with stone or gravel sur-



AUSTIN ROAD-RIPPER.

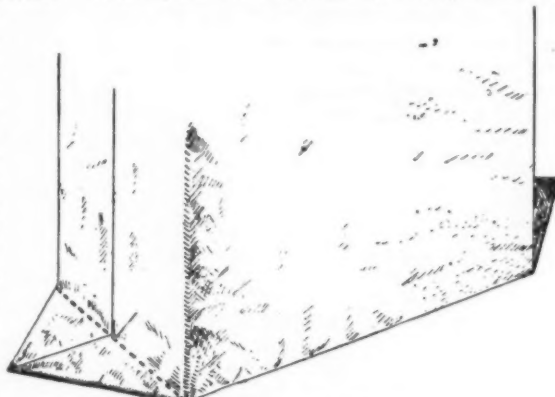
face can be torn up to the depth required at the rate of from one-half to two miles of road per day. The teeth, or tines, which are held securely in tapered sockets by large cotter pins, are of special steel, 2 1/4 inches square, and are claimed to penetrate the hardest surfaces. So powerful and strong is the ripper that it is claimed macadam roads can be torn up, and such work, heretofore requiring a special scarifying machine, is undertaken successfully. It is constructed

entirely of steel, with a total length of 8 feet, holding six tines and weighing approximately 1050 pounds. Tines are set at a rooting angle of 45 degrees and are adjustable at the will of the operator, and may be set to scarify any depth from 1 to 12 inches. With all tines in place, six feet of roadway can be scarified at one time.

Through the modern demand for very heavy graders suitable for use with large traction engines, the Western No. 10 grader was developed. Special features of this grader are described by the Austin-Western Road Machinery Co. as follows:

"Strength, which is the main essential of a heavy tractor grader, having been assured, the next most important point is to secure a machine with the greatest range of convenient adjustments to accomplish the maximum results under most varied conditions. The Western No. 10 is a composite design, in which is embodied all necessary or desirable features found on the many graders now in use, together with several important, exclusive improvements which mark this machine distinctive.

"Heavy Z bars are used on the main frame, and in place of bolts and nuts, three-quarter-inch rivets are used, a guarantee of permanency, thereby eliminating



LAWLER FLAT-BOTTOM BAG.

lost motion which results from loose parts and making certain a smooth, even cut.

"The blade is not rigidly attached to the blade beams, but has a lateral adjustment of 22 inches in either direction. This adjustment is automatic and controlled by the position of the stay chains. This feature brings the cutting point in a more direct line with the draft and relieves the machine of the tremendous leverage or strain, which has proved so disastrous to other machines with 10 or 12-foot blades. Furthermore, this automatic side shift places the blade in such position that its entire length is utilized, making the capacity of this machine with a 10-foot blade equal to or greater than any other with a 12-foot blade.

"An 18-inch extension is provided for each end of the blade. This is a special shape for cutting new or cleaning out old ditches, undermining embankments or filling in old ditches. With this attachment the machine will cut outside of the wheels a maximum of four feet.

"The blade-lifting mechanism is ingenious and most effective. A roller-bearing chain is used in connection with sprocket, rack and pinion—a most powerful lifting device and very rapid."

### Clark Meter Coupling Yoke.

A new meter coupling yoke has recently been developed by the H. W. Clark Company, manufacturer of the Clark meter box and water-works appliances, Mattoon, Ill. The yoke is made up of cast iron and brass in such a manner that it is claimed to be non-breakable and indestructible. It is used in the place of meter coupling, and is adapted to installations in meter boxes of any type and make, and also to meters placed in basements. For the basement meters the coupling yoke is furnished with tappings in the top on one end for the outlet side of the house supply. The yoke is made up without the use of a union or right and left fittings, as there is enough flexibility in the riser pipes, owing to the manner in which the meter is cut in, to permit

the assembling of the two parts of the coupling yoke after each has been screwed on to the riser pipe.

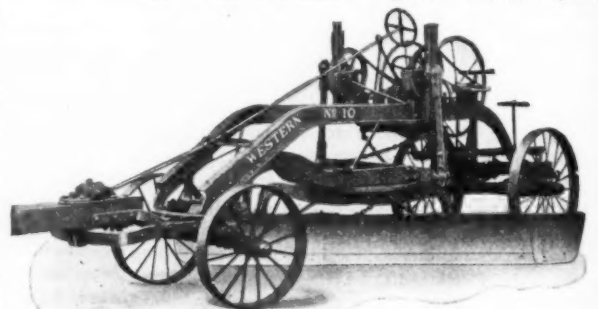
It is noted from the illustration that the meter coupling yoke is placed by cutting into the line without taking out a section therein, but by making a single cut



METER COUPLING YOKE.

do the work. When the pipe is cut apart the two ends are bent by means of a bar, or by using a spade as a lever, throwing them in opposite directions sufficient to admit the meter between the risers in a crosswise position. Advantages secured by this operation are as follows:

Coupling up of the meter yoke is accomplished without the use of a union or right and left thread, being



WESTERN NO. 10 GRADER.

placed crosswise of the line; the risers are held rigid so that they cannot swing in either direction, thus eliminating the possibility of a meter or riser pipe coming in contact with the wall of a box body and thus conveying frost to the meter. Instead of a riser as shown, street ells may be connected onto the service pipe and screwed into the coupling, assembling being made without the use of union or right and left fittings. Construction is such that the stop cock may be used inside of the meter box in connection with the coupling yoke when desired. A ready and easy sliding adjustment is had for taking care of meters of different lengths as well as the expansion and contraction of the service pipe. The lock shield adjusting screw construction, requiring a special socket key to operate, eliminates the necessity of sealing the meter, although if the wire seal is desired in connection with the screws at the top of the meter the same wire can readily be extended around any part of the yoke and a single seal used to close the entire installation.

The Clark meter coupling is said to be particularly well adapted for use in the South, where the meter is placed on a line with the service. The coupling yoke is made in sizes of 1/2, 3/4 and 1 inch, and is also made in a special size of 5/8 inch to accommodate meters with 3/4-inch spuds. Full illustrations, specifications and price will be furnished on request to the company.



### Simplex "Special" Swage.

The accompanying illustration represents a specially designed swage made for the hardest problem known in saw-milling practice, namely, for dressing the teeth of all makes of inserted tooth saws, from No. 4 to 11 gauge in thickness, requiring a swaged point varying from 5-32 to 7-16 inch spread at the extreme point, having a tooth space of  $1\frac{1}{4}$  inches or more.

It is stated this swage will work equally well upon solid circular mill, boiler or edger saws, as well as upon heavy band and gang saws, coming within the specifications named in the foregoing paragraph.

With this device the saw teeth or points are swaged by rolling or drawing the teeth outward from the face toward the point, thus producing a deeply swaged and strong point. Having better cutting points, the output of the mill is increased, better lumber is produced with the same power and help, and it is claimed the use of this tool will reduce the saw teeth and saw bills from 30 to 50 per cent.

The Simplex "Special" swage is made from chrome-nickel steel. All wearing parts, even to the screws and their seats, are scientifically heat treated, hardened and tempered, thereby insuring greater strength and durability.

While this swage is provided with all necessary means for adjustment, the stroke of the swaging lever is limited, thus preventing the unnecessary breaking and crushing of the working parts. This swage is furnished with or without bench attachment, as may be required.

All sawmill owners with a good credit rating in Dun's or Bradstreet's may secure this tool upon 30 days' trial, subject to their approval, by addressing the manufacturer, the Peter Gerlach Company, Cleveland, Ohio.

### Fargo Cable Grips.

Among the new cable connecting devices manufactured by the Fargo Manufacturing Co., Poughkeepsie, N. Y., is a steel cable grip for fastening guy wires supporting poles. No set screws or bolts are used in its construction. The cable grip, as shown in one of the accompanying illustrations, is of the compression type. The connector gripping the cones is set side by side in a single casting and the pressure on the cable is applied by stuffing-boxes which are screwed against the ends of the gripping cones. This device can be used as readily in the mechanical field as in the electrical.

Other forms developed by the company include guy grips especially adapted for span wires, ground-point connections of the "B" type, straight type, cable lugs, "T" and "Y" compressor connections, etc.

With these cold weld grips it is stated that the cables will break off before the connection will give away, and the cases will stand a strain up to 40,000 pounds to the square inch.



CABLE LUG, CLASS 9900.

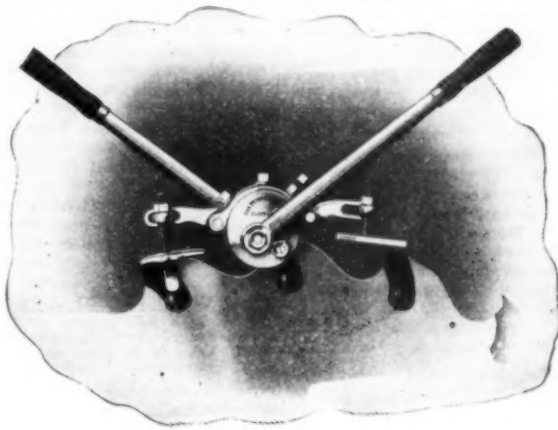


STEEL CABLE GRIP, "A" TYPE, CLASS 4400.

## TEXTILES

### Norcott Mills Co.

Plans have been completed for organizing the Norcott Mills Co., Concord, N. C., which has incorporated with an authorized capital of \$250,000. Machinery has been ordered for the plant, and other details are being considered. F. J. Haywood, Concord, C. W. Johnston of



SIMPLEX SWAGE.

Charlotte and W. D. Broadfoot of Concord incorporated the company. Mr. Haywood and associates were mentioned recently as planning another mill company.

### For a Knitting Mill.

Plans are under consideration for the establishment of a knitting mill capitalized at from \$100,000 to \$150,000 at Murfreesboro, Tenn., the Murfreesboro Board of Trade being interested. This organization desires to correspond with knitting-mill machinery manufacturers and with practical knitting-mill managers who will become interested and manage the proposed plant.

### Textile Notes.

Acme Hosiery Mill, Asheboro, N. C., will build addition to about double capacity.

Cowikee Cotton Mills, Eufaula, Ala., does not contemplate additions lately mentioned; reports were erroneous; lately installed new spinning and speeder frames.

Avondale Mills, Birmingham, Ala., will install 22,000 tape drive clutch spindles, picking machinery, drawing, slubbers, intermediates, roving equipment, etc.; has contracted for this new additional equipment.

Maysville Cotton Mills, Maysville, Ky., will build addition, reconstruct dyehouse and rebuild burned cotton shed; J. E. Sirrine, Greenville, S. C., engineer-architect in charge.

Guadalupe Valley Cotton Mills, Cuero, Tex., will build an addition of brick and frame construction on concrete foundations, with gravel roof; will add 5 carding machines, 4 spinning frames, 32 looms, etc.

Elk Cotton Mills, Fayetteville, Tenn., will erect 150x125-foot addition for 5000 spindles; for additional power probably utilize exhaust into low pressure steam turbine; reported to expend \$90,000.

Georgia Manufacturing Co., Columbus, will build a second story to its warehouse and dye plant in order to provide an increase in the dye plant, the lapping-room and the opening-room. It has awarded contract

for the addition, the cost to be about \$8000, to C. M. Barlow of Columbus.

R. P. Brooks and associates have purchased the Star Cotton Mills, Forsyth, Ga., changed the name to Forsyth Cotton Mills and will replace the present machinery with new equipment. They have ordered this machinery.

Richmond Hosiery Mills, Rossville, Ga., has let contract to Mark K. Wilson Company, Chattanooga, Tenn., to erect buildings for recently-mentioned branch mill at Soddy, Tenn. These buildings will comprise a 100x50-foot one-story factory and a 40x18-foot boiler-house, both with concrete floors. J. D. Alsop, Chattanooga, is the architect.

### Virginia-Carolina Chemical Co.

The consolidated statement of earnings and surplus account of the Virginia-Carolina Chemical Co. and subsidiary companies for the year ending May 31, 1915, shows: Surplus May 31, 1914, \$9,050,134.79; add net earnings for year ended May 31, 1915, after deducting \$1,476,125.69 for repairs and maintenance and setting aside \$673,820.54 to reserve for doubtful debts and cash discount on accounts not yet settled, \$4,979,949.32; less interest and discount, interest on bonds and interest on debentures (\$1,265,740.52), leaves \$3,714,208.80 as net profits for the year, which, added to the foregoing surplus, makes a total of \$12,764,343.59. From this is deducted dividend on preferred stock, leaving \$11,164,343.59. From this is deducted commissions and expenses in connection with the issue of debentures; additional reserve for doubtful debts, etc., and difference between book and sales value of capital assets of the Southern Cotton Oil Co. sold or dismantled during the year, leaving the surplus May 31, 1915, as \$10,689,101.53. The total assets shown by the balance-sheet are \$88,182,324.23, of which capital assets are \$50,935,204.96 and current assets \$36,402,601.85.

### \$300,000 for Houston Harbor Improvements.

In accordance with plans recently announced as following the arrangements completed for a ship service between New York and Houston, Tex., by way of the Houston ship channel, the municipal officials of Houston have determined upon harbor improvements to cost \$300,000. These improvements may be briefly outlined as follows: City will immediately invest nearly \$300,000 to construct wharf, cotton sheds and railroad trackage on north side of channel near turning-basin; expenditure named will include \$95,000 for 4226 acres fronting on channel; awarded contract to Horton & Horton to construct wharf, cotton sheds and tracks, work to cost \$139,000; contract to L. T. Gaylord for dredging at turning-basin, to cost \$50,000, to deepen channel at site of new wharf and warehouse; Southern Engine & Pump Co. has contract to construct two elevated tanks at turning-basin, to cost \$7000.

### Sloss-Sheffield Improvement Plans.

An expenditure of \$100,000 is proposed for improvements to the iron mining and manufacturing facilities of the Sloss-Sheffield Steel & Iron Co., Birmingham, Ala. The amount of \$50,000 has been appropriated to install electrical machinery, improve washing machinery, provide water storage, etc., at the Russellville brown iron mines, and \$50,000 has been asked for to improve the iron furnaces at North Birmingham. These furnace betterments are to include the installation of two additional blowing engines and other machinery, to keep the company's daily output of iron at about 700 tons.

An elaborate program has been arranged for the eighth annual outing of the Contractors and Dealers' Exchange, New Orleans, La., which will occur Wednesday, August 11. It is intended that the occasion shall be in a measure a tribute to the efficient administration of the president of the exchange, Mr. Herman H. Thomas, who is one of the large lumber dealers of the South, and who has managed the affairs of the exchange in a conspicuously broad-gauged manner.

# Construction Department

## IN ORDER TO FOLLOW UP

Properly the Construction Department items, please bear in mind the following statements:

### EXPLANATORY

The MANUFACTURERS RECORD seeks to verify the items reported in its Construction Department by full investigation. It is often impossible to do this before the item must be printed or else lose its value as news, and in some items it is found advisable to make statements as "reported" or "rumored," and not as positive information. If our readers will note these points they will see the necessity of the discrimination. We are always glad to have our attention called to errors that may occur.

### HOW TO ADDRESS

The name of one or more incorporators of a newly incorporated enterprise should always be written on letter addressed to the official headquarters or to the town of the parties sought, as may be shown in the item. Sometimes a communication merely addressed in the corporate or official name of a newly established company or enterprise cannot be delivered by the postmaster. By following these general directions the postoffice will generally be enabled to deliver your mail promptly, although it is inevitable that some failure by the postal authorities to deliver mail to new concerns will occur, as our reports are often published before new companies are known and before they have any established office for the receipt of mail.

### WRITE PERSONAL LETTERS

In communicating with individuals and firms reported in these columns a letter written specifically about the matter reported will receive better and quicker attention than a circular. In most instances a return postal card or addressed and stamped envelope should be enclosed with letter.

In correspondence relating to information published in this department, it will be of advantage to all concerned if the Manufacturers Record is mentioned.

### DAILY BULLETIN

The Daily Bulletin of the Manufacturers Record is published every business day in order to give the earliest possible news about new industrial, commercial, building, railroad and financial enterprises organized in the South and Southwest. It is invaluable to manufacturers, contractors, engineers and all others who want to get in touch at the earliest moment with new undertakings, or the enlargement of established enterprises. The subscription price is \$25 per year.

All advertising contracts in the Manufacturers Record for three months or longer include a subscription to the Daily Bulletin for the contract period, as well as a subscription to the Manufacturers Record.

### BRIDGES, CULVERTS, VIADUCTS

Ark., Camden.—Board of Comms. of Martin Free Bridge invite bids until Aug. 9 for additions and reinforcements to Pivot Pier; cofferdam, 114 horizontal lin. ft.; excavation, 670 cu. yds.; plain concrete, 382 cu. yds.; reinforced concrete, 482 cu. yds.; riprap, 2000 cu. yds.; also jacking up and shifting superstructure; I. A. Baum, Engr. (See Machinery Wanted—Bridge Work.)

Ark., Little Rock.—Chicago, Rock Island & Pacific Ry., C. A. Morse, Ch. Engr., Chicago, Ill., has plans for reinforced concrete viaduct across tracks on E. 2d St.; reinforced concrete and steel; 70 ft. long, 46 ft. wide; 6-ft. sidewalk on each side; ornamental steel railing, arch shaped; concrete roadway with sheet asphalt surface; sidewalks paved with wooden blocks; estimated cost \$30,000; construction by railroad under supervision of Henry Levinson, City Engr.

Fla., Kissimmee.—Oseola County Comms. will construct bridge costing \$1000.

Ga., Bainbridge.—Decatur County Comms. contemplate building 2 bridges; cost \$3000.

Ga., Guyton.—Bulloch County Comms., Statesboro, Ga., and Effingham County Commissioners, Springfield, Ga., will erect previously-noted bridge across Ogeechee River; cost \$4500; bids at public outcry Sept. 6; plans and specifications at Statesboro. (See Machinery Wanted—Bridge Construction.)

Ky., Calvin.—Bell County Fiscal Court let contract Vincennes Bridge Co. of Vincennes, Ind., at \$7060 to construct steel bridge across Cumberland River, and to Martin Green, Robt. Vanbever and Edw. Pursifull, all of Pineville, at \$2541, to construct substructure, piers and abutment; city to furnish stone used in concrete piers.

Md., Baltimore.—Pennsylvania R. R., Alex. C. Shand, Ch. Engr., Philadelphia, Pa., let contract Brann & Stuart Co. of Philadelphia, Pa., to construct bridge over tracks on Charles St. at Union Station; probably of steel covered with concrete.

Okl., Fairview.—Major County Comms. contemplate construction of about 40 bridges; cost \$10,000; G. A. Newton, County Clerk.

Okl., Kingfisher.—Kingfisher County Commissioners, Wm. G. Newer, County Clerk, will open bids Aug. 16 to construct lately-noted 17 steel and concrete bridges; esti-

mated cost \$21,500; C. R. Steel, Engr. (See Machinery Wanted—Bridge Construction.)

Okl., Lawton.—Comanche County Commissioners contemplate expending \$10,000 on bridge construction; S. A. Joyner, County Engr.

S. C., Greenville.—Greenville county will construct Holtzclaws Bridge over Enoree River; covered wood structure on concrete piers, pile foundation; 2 85-ft. spans; bids until Aug. 9; W. Henry Willmon, Supvr. (See Machinery Wanted—Bridge Construction.)

S. C., Walhalla.—Oconee county will rebuild Hunnicutt bridge across Little River near Stamp Creek; let contract Aug. 9; W. C. Foster, Supvr. (See Machinery Wanted—Bridge Construction.)

Tex., Canadian.—Hemphill County Commissioners' Court will receive competitive plans and bids on Aug. 23 for bridge to be constructed across Canadian River; issued \$74,000 bonds.

Tex., Houston.—Harris County Comms. ordered bids received to construct 2 bridges, 1 across Hall's Bayou on Houston and Aldine Rd. and other on West Montgomery Rd.

Tex., Terrell.—Kaufman county, Prec. No. 3, will construct concrete culverts and bridging, creosoted timber bridging, concrete headwalls, etc.; Road Comms. Terrell, Tex., receive bids until Aug. 26; Bartlett & Ranney, Engrs., San Antonio and Dallas. (See Machinery Wanted—Bridges, etc.)

Va., Portsmouth.—City will construct concrete box culvert in Dinwiddie St. between Race Ave. and Harrison St.; City Clerk receives bids until Aug. 6; S. Cleburn Brown, Chmn. Street Committee. (See Machinery Wanted—Culvert Construction.)

W. Va., Hinton.—Summers county, Greenbrier Dist., votes Aug. 23 on \$150,000 bonds to construct bridges and roads. J. M. Carden, County Clerk. (Lately noted.)

W. Va., Hinton.—Summers county, Talcott Dist., votes Aug. 23 on \$100,000 bonds to construct bridges and roads; J. M. Carden, County Clerk. (Lately noted.)

W. Va., Martinsburg.—Berkeley County Comms. let contract Concrete Steel Bridge Co. of Clarksburg, W. Va., at \$2730 to construct 70-ft. reinforced concrete arch bridge over Mill Creek at Chapman's Ford, 4 mi. east of Bunker Hill; E. A. Hobbs, Clerk County Court. (Call for bids lately noted.)

### CANNING AND PACKING PLANTS

Ala., Troy.—Troy Packing Co. organized with John M. Sanders, Pres.; Ed Smart, V.-P.; A. B. Dunn, 2d V.-P.; W. M. Reeves, Secy.-Treas. will build packing plant to cost \$40,000.

Fla., Okeechobee.—D. Phillips will build fruit and vegetable packing-house; estimated to handle 50,000 boxes of fruit and about twice that amount of crated truck; let contract Ed Scharfschwerdt.

Mo., Galena.—Roy Nelson Canning Co., capital \$15,000, incptd. by Roy Nelson, Harve Stentz and Laola G. Nelson.

Okla., Muskogee.—Muskogee Fruit Growers' Canning Co., capital \$5000, incptd. by D. M. Randle, R. V. Anderson, C. R. Everett and O. P. M. Butler.

Va., St. Paul.—St. Paul Canning & Preserve Co., capital \$25,000, incptd.; Sam Wilburn, Pres.; Elizabeth Wilburn, V.-P.; M. L. Hillman, Secy.-Treas.

### CLAYWORKING PLANTS

Ark., Dexter.—Pottery.—J. E. Pankhurst of Pine Bluff, Ark., is reported to establish pottery.

La., New Orleans.—Sand-Lime Bricks.—New Orleans Silica Brick Co. organized with Jas. H. Dyett Pres., Frank Bowers V.-P., Lionel M. Ricau, Treas.; will erect sand-lime brick plant; main building, 50x160 ft.; daily capacity, 75,000 bricks.

### COAL MINES AND COKE OVENS

Ky., Ashland.—Kentucky Solvay Coke Co. (general office, Syracuse, N. Y.) has plans for doubling plant; build 54 additional ovens with daily coking capacity 1000 tons coal, duplicating present equipment; Smet-Solvay horizontal flue regenerator type ovens, each of daily capacity 20 tons coal; additional ovens and construction of plant for screening and preparing coke for entire works will cost about \$700,000; coke-handling plant to be fireproof in every detail, replacing present temporary installation; W. H. Blauvelt, Consult. Engr., Syracuse. (Lately noted increasing capital stock from \$650,000 to \$1,500,000 to double plant, etc.)

Okla., Quinton.—Highland Coal Co., capital \$100,000, incptd. by R. E. Peer, C. L. Engle and T. J. Spear, all of El Reno, Okla.

Okla., Okmulgee.—Okmulgee Coal Co., capital \$20,000, incptd. by W. Thornburgh, Harlan Read and H. E. Kennedy.

Tenn., Chattanooga.—Fort Coal & Land Co., capital \$25,000, incptd. by Sarah F. Milton, J. P. Fort, Jr., Eliza V. Tarver and others.

### CONCRETE AND CEMENT PLANTS

Va., Norfolk.—Cement Roofing.—R. C. Cottam of Salisbury, N. C., is reported to build plant to manufacture cement roofing, known as Cementile; expend \$25,000 to \$30,000 for machinery.

### COTTON COMPRESSES AND GINS

Ala., Lee County.—W. C. Bradley of Columbus will build gin; cost about \$7000; let construction contract to Savannah company; machinery contract to Lummus' Cotton Gin Co. of Columbus, Ga.

Ark., Blytheville.—Joe Meyer will install cotton gin; let contracts.

Ga., Sparta.—Edward Rozier, Jr., and John Henry Baker will establish gin; install four 80-saw gins.

La., New Orleans.—New Orleans Pickery Co. will erect 2-story frame cotton pickery at Bordeaux and Annunciation Sts.; E. R. Spurl, Archt.

Okla., Blair.—Blair Gin & Cotton Co., capital \$10,000, incptd. by J. R. Hollum, W. A. J. Black, W. D. Walker and others.

S. C., Drake.—W. B. Drake will rebuild gin and mill reported burned at loss of \$4000.

Tenn., McKenzie.—Crescent Cotton Oil Co. will build gin; erect seedhouses, shipping platform, etc.

Tenn., Memphis.—Edmondson Gin Co., capital \$5000, incptd. by J. C. Rainer, Hugh Connell, E. T. Lindsey and others.

Tex., Hicks.—Hicks Gin & Cotton Yard Co., capital \$1000, incptd. by B. M. Hutcherson, W. W. Kyle and O. A. Kyle.

### COTTONSEED-OIL MILLS

N. C., Wilmington.—Union Cotton & Seed Fertilizer Co. let contract Rhodes & Underwood of Wilmington to erect building for

linter-room; install 8 or 10 linters to cost about \$10,000; building to cost \$2000.

Tex., Houston.—Efficiency Oil Products Co., capital \$1000, incptd. by H. G. Hertel, W. F. Koch and J. M. Rosborough.

### DRAINAGE SYSTEMS

Ark., Lorado (not a P. O.).—Jason L. Light, Greene County Judge, Paragould, Ark., appointed engineer to make preliminary surveys and estimates of drainage canal near Lorado; canal will drain and reclaim 3000 acres; estimated cost, \$3000.

Fla., Parish.—Drainage Comms. will open bids about Sept. 1 on lately-noted drainage construction in Manatee county; main canal and 9 laterals; 3 to 20 ft. bottom width; 5 to 27 ft. depth; slopes 1½ to 1; 2 mi.; 896,202 cu. yds.—sand, clay and muck; estimated cost \$100,000; drain 40,000 acres for farming; Engr., Chas. S. Hill, Palmetto, Fla. (See Machinery Wanted—Drainage.)

Ky., Paducah.—Mayfield Creek Drainage Dist. contemplates drainage of about one-third of 50-mi.-length of Mayfield Creek Valley; awaiting report from Engrs.; J. Mike Oliver, Atty., interested. (Previously noted.)

La., Abbeville.—Young's Coulee Drainage Dist. voted \$21,000 bonds to construct drainage system. Address Drainage Comms. (Lately noted.)

La., Gueydan.—Warren V. Reed, Engr., Morgan City, will supervise preliminary survey for drainage system estimated to cost about \$200,000; district comprises 65,000 acres gravity drainage lands.

La., Napoleonville.—Platte Drainage Dist. organized to drain 20,000 acres; J. C. Waties, C.E., will make surveys.

Mo., Poplar Bluff.—Butler County Drainage Dist. No. 10 let contract Northern Construction Co., Elkhart, Ind., at \$76,000 to construct drainage system; 9 drainage canals and 28 steel bridges; total length, 187,667 ft.; excavation, 1,021,607.89 cu. yds.; John H. Gresson, Engr.; J. D. Chambers, Clerk County Court. (Call for bids lately noted.)

Tenn., Selmer.—Cypress Creek Drainage Dist., McNairy county, H. P. Wood, Atty., will build lately-noted canal; 2 sections; first section 11,400 ft. long, with cross-section of 18x12x6 ft.; second section 10,900 ft. long, with cross-section of 20x13x7 ft.; cost about \$10,000; bids opened Aug. 16; drain 850 acres. (See Machinery Wanted—Drainage.)

### ELECTRIC PLANTS

Ala., Guntersville.—Alabama Power Co., F. H. Chamberlain, Gen. Mgr., Birmingham, Ala., will install lately-noted steam plant; apparatus supplied; has accepted street-lighting contract, including 40 100-watt Mazda lamps, pumping contract for city water system, and will start with about 175 to 200 lighting customers; installation by the company's force; service probably by Sept. 15; transmission system to Guntersville, Albertville and Boaz will probably not be built for some time.

Ala., Jacksonville.—Alabama Power Co., F. H. Chamberlain, Gen. Mgr., Birmingham, Ala., received franchise and street-lighting contract; will rebuild system (formerly owned by Calhoun Light & Power Co.) or install new system connecting with Alabama Power Co.'s line now under construction from Anniston to Piedmont.

Ala., West Blocton.—Alabama Power Co., F. H. Chamberlain, Gen. Mgr., Birmingham, Ala. (lately noted as applying for franchise), is installing complete distributing system for service by Oct. 1; will have 50 K. V. A. substation in connection with regular high-tension line now being built from Helena to Blocton; estimated cost \$10,000; also contemplating contract for city pumping.

Fla., Frostproof.—Lake Region Electric Light & Power Co., E. J. Brasseur, Mgr., Lakeland, Fla., will install lately-described plant; 70 H. P. (See Machinery Wanted—Electric-plant Equipment.)

Fla., Fivay.—Fivay Improvement Co. will install electric-lighting equipment. (See Land Developments.)

Ga., Caldwell.—City voted \$3000 bonds for electric-light and water-works improvements. Address The Mayor.

Ky., Dawson Springs.—Dawson Light & Power Co., capital \$7500, incptd. by Jas. Clark, Jr., Walter S. Clark and Brent Hart.

In writing to parties mentioned in this department, it will be of advantage to all concerned if the Manufacturers Record is mentioned.



Ky., Hazard.—Kentucky River Power Co., capitalization \$350,000, will be organized by Edw. O'Toole, Gen. Supt., Howard N. Eavenson, Chief Mining Engr., both of United States Coal & Coke Co., Gary, W. Va., Kentucky and Baltimore capitalists; R. L. Cornell, Wootton and Morgan Bldg., Hazard, in charge at present; secured control of East Tennessee Coal Co. electric plant and will enlarge it; use to supply electricity while building central station now being planned; this station of reinforced concrete and steel construction, equipped with turbo-generator unit, condensers, automatic stokers, ash-handling equipment, etc. (Mr. Eavenson and others lately noted financing company, etc.)

La., New Orleans.—City will construct electric-light plant; W. J. Hardee, City Engr.

Mo., Knobnoster.—Johnson County Light & Power Co., capital \$500,000, incptd. by S. A. Kelley, Guy C. Cooley and Jas. Ennis.

N. C., Ayden.—City votes Aug. 20 on \$15,000 bonds to construct electric-light system. Address The Mayor.

N. C., Cape Fear (not a P. O.).—Government let contract Carroll Electric Co., 514 12th St. N. W., Washington, D. C., at \$2787 to construct electric-light plant at United States Quarantine Station. (Call for bids noted in May.)

N. C., Dunn.—Town Commrs. have plans to enlarge electric-light plant; ordered engines, dynamo, etc.

N. C., Wake Forest.—City, J. C. Caddell, Mayor, voted previously-noted \$10,000 bonds; will expend \$5000 or \$6000 of this amount to enlarge electric-light plant, installing additional machinery.

Okla., Shelbina.—Municipal Electric-light Dept. contemplates purchasing 7½ K. W., 230-110-volt transformer; E. P. Weaver, Supt.

Tex., Brandon.—Texas Power & Light Co. of Dallas contemplates installing electric-light system; extend transmission system from Milford.

Tex., Jourdanton.—Atascosa Ice, Water & Light Co. let contract J. B. Hudson of Hudson & Braden, San Antonio, to construct electric-light system.

Tex., Merkel.—Abilene Gas & Electric Co., Abilene, Tex., purchased Merkel Electric Light Co.; will improve plant and construct transmission line from Abilene to Merkel; installing substation at Abilene.

Tex., San Angelo.—San Angelo Water, Light & Power Co. is reported to expend \$50,000 for improvements, to include additional machines at power plant.

## FLOUR, FEED AND MEAL MILLS

Ala., Selma.—Eugene Driskell will build mill.

Ark., Blytheville.—Walton Bros. will install corn mill; building erected; machinery contracts let; daily capacity 500 bags chops, 150 bus. meal; Allan Walton, Prest. and Mgr.; Roy Walton, V.-P.; Guy Walton, Secy.-Treas.

Fla., Fort Meade.—W. J. Reid will build grist mill.

Ky., Warsaw.—George T. Thompson of Georgetown, Ky., purchased Crown Flour Mill and will operate; let contract for \$3500 worth of additional machinery.

S. C., Drake.—W. B. Drake will rebuild mill and grain reported burned at loss of \$4000.

Tenn., Memphis.—John Wade & Sons let contract Kaucher & Hodges to build flour and corn meal mill at Virginia Ave. and Illinois Central R. R.; 5-story iron-clad frame building; install grinding machinery to have daily capacity of 500 bbls. of flour and meal combined; reported cost, \$75,000.

## FOUNDRY AND MACHINE PLANTS

Md., Curtis Bay.—Cars.—Baltimore Car & Foundry Co. (Standard Steel Car Co., Pittsburgh, Pa.) contemplates improvements; has not made any definite decision; details managed from Pittsburgh.

Tenn., Nashville.—Heater.—Union Iron Co., 135 Ninth Ave. N., G. B. Chapman, Asst. Secy., owner of double heating grate and hygienic heater, is considering establishing manufacturing plant, and is seeking suitable city for location.

Va., Phoebus—Iron Works.—Phoebus Iron Works, capital \$10,000, incptd.; Wm. C. L. Tallafiero, V.-P.; Jas. M. Cumming, Secy.-Treas., both of Hampton.

## GAS AND OIL ENTERPRISES

Ga., Augusta.—Oil Station.—Texas Co. (main office, Houston, Tex.) is reported to

build plant consisting of 30x50-ft. warehouse, 10-stall barn, wagon shed and office building; bulk storage equipment to consist of three 10x30 steel tanks, built on concrete foundation; estimated cost, \$10,000; J. H. Sayer, Chief of Construction, in charge of construction; Dr. Harry G. Thompson to be Mgr.

La., Alexandria.—Oil Refinery.—Federal Oil & Refining Co., capital \$150,000, organized with W. W. Whittington, Prest., Alexandria; Jos. P. Tinker, V.-P., Chicago; H. L. Carnahan, Secy.-Treas., Shreveport; will build refinery; daily capacity, 1000 bbls.; built in units of 250 bbls. each; use vacuum process. J. L. Tucker of Tucker & Co. is fiscal agent.

La., Baton Rouge.—Standard Oil Co. of Louisiana is reported to construct 14-in. pipe line from Baton Rouge to connect with oil fields of Texas; length 250 mi.; pipe to rest on bottom of river and on top of ground except where it crosses railroads and highways.

La., Keithville.—Clingman Oil Co., capital \$20,000, incptd.; A. K. Clingman, Prest., Keithville, La.; W. L. Dickinson, V.-P.; Dr. C. T. Munday, Secy.; Wm. L. Young, Treas., all of Shreveport; will develop oil wells at Keithville.

Okla., Muskogee.—Sheppard Oil Co., capital \$25,000, incptd. by J. C. Stone of Muskogee, B. B. Goings and John A. Sheppard, both of Huntington, W. Va.

Okla., Oklahoma City.—French Oil & Gas Co., capital \$10,000, incptd. by R. H. Kennedy, Frank Broadwell and J. B. French.

Okla., Sapulpa.—Almar Oil & Gas Co., capital \$25,000, incptd. by Alex. Marshall, A. R. Morgan and L. C. Morey.

Okla., Tulsa.—Carton Oil Co., capital \$500, incptd. by Alex. Lewis, Jas. Pratt and C. B. Fulton.

Okla., Tulsa.—Pax Oil Co., capital \$150,000, incptd. by Henry Mendius of Newkirk,

still central refrigerating plant to furnish refrigeration to stalls; market to contain 52 stalls and cost about \$50,000.

## IRON AND STEEL PLANTS

Ala., North Birmingham.—Iron Furnace.—Sloss-Sheffield Iron & Steel Co., Birmingham, is reported as contemplating \$50,000 appropriation for further improvements at blast iron furnace, North Birmingham; proposed to add blowing engines and other machinery.

Md., Cumberland.—Steel Furnace.—N. & G. Taylor Co., Chestnut and 3d Sts., Philadelphia, Pa., will build additional open-hearth furnace and provide accompanying equipment because of its increase in steel production; details by company's staff; engineering probably by Forter-Miller Engineering Co., Pittsburgh, Pa., in charge of previous construction; Belmont Iron Works, Philadelphia, in charge of steel building construction; daily capacity of furnaces, 25 tons each; company's present annual output, 26,000 tons.

Tex., Texas City.—Steel Plant.—Southwestern Steel Development Co., C. A. Cheatham, Secy., Houston, is reported as to hold meeting Aug. 3 to perfect plans for construction steel plant; Texas Resources Development Co., capitalization \$4,000,000, has been chartered and understood to be for purpose of working in conjunction with steel company. (Previously reported organized with \$30,000,000 capitalization, etc., E. G. Spilsbury, 45 Broadway, New York, to be engineer.)

## LAND DEVELOPMENTS

Fla., Fivay.—Fivay Improvement Co. (noted in January with \$100,000 capital, Wm. L. Sonntag of St. Paul, Minn., Prest., having plans prepared for reinforced concrete seawall about 400 ft. long, with concrete spillway, 55-acre golf course, 10,000-gal.

## PROPOSAL ADVERTISEMENTS IN THIS ISSUE

PUBLISHED ON PAGES 84 and 85.

In order to secure best bids from leading engineers, contractors and investment houses, the proposal advertising columns of the Manufacturers Record are invaluable.

Rate 20 cents per line per issue.

When Proposal Advertisements cannot be sent by mail in time to secure insertion before date for opening bids, please wire advertisement copy by Night Letter.

Proposal Advertising must reach us not later than 9 A. M. Wednesday for publication in issue of that week.

Okla., Jno. H. Stearns and Ernest Munster of Chicago, Ill.

Tex., Brenham.—Calhoun Oil Co., capital \$20,000, incptd. by Wm. Wendt, A. A. Hocker and Joe Cathriner.

Tex., Houston.—Milam Oil & Gas Co., capital \$45,000, incptd. by C. B. Porter, A. R. Howard and T. G. Frazee.

## ICE AND COLD-STORAGE PLANTS

Ala., Birmingham.—Central Ice Co. will double capacity of present plant and erect additional factory.

Ala., Gadsden.—Louis Carson of Gadsden and Will Carson of Piedmont, Ala., will build cold-storage plant. (See Miscellaneous Enterprises.)

Ga., Lyons.—Alton B. Cowart is interested in establishment of ice factory.

La., New Orleans.—American Fish Co., D. C. O'Malley, Prest., leased 3-story building and will expend about \$30,000 for improvements to include cold-storage room in rear of lower floor and remodeling of upper floor for offices; cold-storage room to have cork walls, elevators, etc.

La., Lake Charles.—J. G. Michle and L. W. Calvert (lessees of Majestic Hotel) will install 5-ton refrigerating plant and ice-making system in hotel.

Tex., San Antonio.—Mission Ice Co. is having plans prepared by Robt. M. McCandlish Engineering Co., Kansas City, Mo., for 60-ton addition to ice plant; raw water system; Diesel engine drive.

• Tex., San Benito.—F. M. Grimes of Fayette, Mo., is reported to build \$10,000 cold-storage plant for handling of poultry and eggs.

Va., Galax.—Galax Ice & Cold Storage Corp., capital \$25,000, incptd.; J. H. Rhudy, Prest.; E. B. Crabbill, Secy.-Treas.

Va., Richmond.—M. B. Florsheim, Propr. Royal Laundry, will build market and in-

tank and tower, pumping machinery for water-works, electric-lighting equipment and general landscape work in connection with underground outlet which discharges waters flowing over dam to Gulf of Mexico, 3 mi. distant; Hiram McElroy, Engr., 410½ Franklin St., Tampa, Fla., in charge construction.

N. C., Charlotte.—Lakewood Park Co. (in June noted incptd., capital \$50,000) develops 65 acres in suburbs as recreation and amusement park; has completed improvements contemplated for this year; will make further improvements next spring; Z. V. Taylor, Prest.; E. C. Marshall, Treas.; J. R. Cherry, Secy.

S. C., Greenville.—Saluda River Land Co., capital \$500, incptd. by C. S. Allen and M. J. Callahan of Greenville and R. Patterson of Charlotte, N. C.

Tex., Corpus Christi.—Nueces Land Co., capital \$12,000, incptd. by G. R. Clark, H. B. Baldwin and D. M. Picton.

Tex., Donna.—La Tijera Plantation Co., capital \$500, incptd. by E. W. Watts, H. B. Galbraith and S. T. Ferguson.

## LUMBER MANUFACTURING

Ark., Blytheville.—Joe Meyer will install sawmill; purchased equipment.

La., Colfax.—Grant Timber & Mfg. Co., Selma, La., purchased 5430 acres pine timber lands in Grant parish for \$48,000.

La., Westlake.—Krause & Managan Lumber Co. will overhaul plant and install additional machinery; let contract to Moore Drykiln Co., Jacksonville, Fla., to convert 3 old kilns into 2 kilns of Moore moist-air system.

Miss., Canton.—Elk Lumber Co. changed name to Stillwell-Crosby Lumber Co. and increased capital from \$50,000 to \$200,000.

Miss., Sumrall.—J. J. Newman Lumber Co. will rebuild mill No. 2, machine shop and drykilns; plant, including 80,000 to 100,000 ft.

lumber, reported burned at estimated loss of \$300,000.

Mo., Springfield.—Des Moines Sawmill Co., Des Moines, Iowa, is reported to build sawmill to manufacture gun stocks.

N. C., Asheville.—John Curry of Ridgway, Pa., and W. G. Curry of Brockwayville, Pa., purchased 600 acres timber near Asheville; will build mill and railroad.

N. C., Lilesville.—Fogle Bros. Co. of Winston-Salem, N. C., will install additional machinery in planing mill at Lilesville; L. F. Everheart of Winston-Salem, Contr.

N. C., Wadesboro.—Polkton Lumber Co., capital \$10,000, incptd. by J. S. H. Clark Lumber Co., Wm. F. Miller and Walter Miller.

N. C., Weldon.—Weldon Lumber Co. will rebuild 5 drykilns recently burned; let contract to Moore Drykiln Co., Jacksonville, Fla.

S. C., Sardinia.—Black River Cypress Lumber Co., capital \$250,000, organized with C. P. Golde Prest., H. W. Hewes V.-P., A. G. Gearheard Secy., and L. W. Gilbert Treas. (Lately noted incptd.)

Va., Dickenson County.—E. R. Boyd and others of Grundy, Va., purchased 8000 acres timber land in Dickenson county and will erect band-saw mill.

## METAL-WORKING PLANTS

Mo., St. Louis.—Metal.—Lewis Metal Co., capital \$500, incptd. by Abraham E. Lewis, Isadore Glueck and Louis Mayer.

Okla., Okmulgee.—Tanks.—Gold Tank Co., capital \$500, incptd. by I. N. Gold, J. T. King and G. W. Harris.

Tex., Fort Worth.—Steel Posts.—American Steel Post Co., John T. Evans, Prest., is reported to build plant with daily capacity 4000 posts.

Va., Norfolk.—Electric Welding.—Virginia Electric Welding Co., 909 Water St., incptd.; capital \$15,000; Jas. A. Ridgwell, Prest.; Frederick Tonnemacher, V.-P. and Mgr.; Wm. H. Ridgwell, Secy.-Treas.; continues operation of equipped electric-welding plant.

## MINING

Ala., Dadeville.—Mica.—Tallapoosa Mica Co., capital \$50,000, incptd. by E. T. Childers of Arcadia, Fla.; A. T. McCormick, W. L. Shumate, A. P. Smith and I. E. Boyette, all of Birmingham; will develop mica mines in Tallapoosa and Jefferson counties.

Ala., Littleton.—Iron.—McDuffie Mining Co., Gadsden, Ala., will develop iron-ore mine.

Ala., Russellville.—Iron.—Sloss-Sheffield Iron & Steel Co., Birmingham, is reported to have appropriated \$50,000 for further improvements and developments at Russellville iron mines; install electrical machinery, improve washing machinery and provide for water storage.

Ark., Marshall.—Evening Star Mining Co., capital \$25,000, incptd. by A. L. Haynes, A. C. Taylor and B. W. Andrews.

Mo., Chitwood.—Lead and Zinc.—Frain & Haynes of Joplin leased King Jack mine near Chitwood and are installing high-pressure boiler and pump; later plan to build concentrating plant.

Mo., Henderson.—Lead and Zinc.—Willie Wills of Neosho, Mo., is reported to develop lead and zinc mines and build concentrating plant.

Mo., Joplin.—Lead and Zinc.—Grand Falls Mining Co., capital \$10,000, incptd. by F. C. Snow, W. L. Kepner and E. H. Moore.

Mo., Kansas City.—Lead and Zinc.—Sunrise Mining Co., capital \$25,000, incptd. by Roscoe Reyburn, Frank W. Baker and Clark W. Brooks.

Mo., Mount Vernon.—Lead and Zinc.—Maud S. Mining Co., capital \$500, incptd. by L. E. and Hattie M. Senecker and Grant Hart.

Mo., Webb City.—Lead and Zinc.—Carlat Mining Co., capital \$20,000, incptd. by C. A. Carlat, M. M. and F. R. Connett.

N. C., Golden.—Ten Flat Mining Co., capital \$100,000, incptd. by H. C. Bushman, V. A. Smith and John M. McGregor.

N. C., Tennesse.—Iron.—Shutin Iron Co., 519 Legal Bldg., Asheville, N. C., lately noted (under N. C., Hot Springs) incptd., has 2 ml. under lease; daily output of ore 90 to 100 tons; Prest., Anson G. Betts; V.-P., A. S. Hulbert; Secy.-Treas., H. G. Etheredge; Mgr., E. V. Correll. (See Machinery Wanted—Locomotive.)

Okla., Lincolnville.—Zinc.—Anchor Zinc Co., capital \$25,000, incptd. by F. L. Stansburg of Lincolnville, A. F. Smith and E. R. Smoot of Joplin, Mo.

Okla., Oklahoma City.—Pemeta Rock Co. (lately noted inceptd.) will operate crusher plant at Pemeta. (See Miscellaneous Enterprises, Okla., Pemeta.)

Okla., Oklahoma City.—Gold and Copper.—Oklahoma Gold Mining & Copper Co., capital \$20,000, inceptd. by E. B. Bradshaw, J. N. Goucher, P. H. Bollinger and others.

Okla., Sunnyside.—Mohawk Mining Co., capital \$40,000, inceptd. by C. E. Miller and J. H. Boswell of Baxter Springs, Kans., and F. E. Sullivan of Chicago.

Okla., Tulsa.—Golden Rod Mining Co., capital \$32,000, inceptd. by David M. Hammett, S. S. Robinson and L. E. Roberts.

Tex., Texas City.—Iron.—Texas City Co., capital \$1,370,000, inceptd. by Hugh B. Moore and Harvey C. Thomas of Texas City and Augustus B. Wolvin of Duluth, Minn.

Va., Petersburg.—Sand and Gravel.—Petersburg Sand & Gravel Corp., capital \$15,000, chartered; M. A. Flinn, Pres.; D. Perkins, V.-P.; David Alexander, Secy. Treas.

W. Va., Grafton.—Sand and Stone.—Sandy Creek Sand & Stone Co. organized by F. C. Graham (Mayor), R. M. Parrish (of Parish Realty Co.) and Jas. A. Sincell (Ch. Engr. for Jas. A. Sincell Co.); acquired about 400 acres on Sandy Creek, 8 mi. from city; will produce white sand for glass, concrete, building and railroad engines; also fine grade white building stone.

### MISCELLANEOUS CONSTRUCTION

Ark., Reydel.—Levee.—Halleck & Thom of Little Rock have contract to construct Farrelly Lake Levee; length 4 mi.; cost \$35,000.

Fla., Fivay.—Seawall, etc.—Fivay Improvement Co., W. L. Sonntag, Pres., having plans prepared by Hiram McElroy, 410½ Franklin St., Tampa, Fla., for reinforced concrete seawall about 400 ft. long, with concrete spillway, and other work in connection with underground outlet which discharges waters flowing over dam to Gulf of Mexico. (See Land Developments.)

Ky., Louisville.—Boiler-house.—Board of Education will erect brick boiler-house; cost \$3100.

Ga., Toccoa.—Dam.—City will construct sectional concrete-wood dam; bds until Aug. 20; H. M. Nabstedt, Engr.; H. J. Cox, City Clerk. (See Machinery Wanted—Dam Construction.)

La., Shreveport.—Levee.—City let contract Sewall Bros. of New Orleans to construct levee on Red River; plan is to build dams so constructed as to throw silt to bank, forming natural levee.

Md., Baltimore.—Mausoleum.—Baltimore Mausoleum Co. inceptd. to build mausoleum to contain probably 500 crypts and cost about \$100,000; L. G. Turner, 706 Union Trust Bldg., Baltimore, is interested; Theo. Wells Pietsch, American Bldg., Baltimore, is preparing plans; Cissell & Co. of Ohio will supervise construction.

Md., Baltimore.—Coal Pier.—Pennsylvania R. R. Co., A. C. Shand, Chief Engr., Broad St. Station, Philadelphia, Pa., let contract Maryland Dredging Co., 1515 Fidelity Bldg., Baltimore, to deepen channel preliminary to construction of coal pier, excavate, remove old piles and drive new ones; 235,000 cu. yds. dredging; 40,000 cu. yds. excavating; 1500 piles; will dredge channel 35 ft. deep and 172 ft. wide for turning largest coal vessel between import and export piers, coal pier, and accompanying construction will cost more than \$1,000,000; will equip with machinery for 10-hr. capacity 6000 tons coal, loading from either side; not yet ready to ask any bids for construction pier. (Other details mentioned in June.)

Md., Brooklyn.—South Baltimore Harbor & Improvement Co., 8 E. Lexington St., Baltimore, let contract to F. B. Beasman Co., 7 Clay St., Baltimore, to grade lot on 2d St. at waterfront and fill ground at 1st St. and waterfront; move about 20,000 yds. earth; fill lot about 450x110 ft.; cost about \$5000; Henry Adams, Engr., Calvert Bldg., Baltimore.

Md., Catonsville.—Swimming Pool.—St. Charles' College will construct concrete swimming pool, 50x80 ft., on Watts estate at Maiden Choice Rd. and Wilkens Ave.

Mo., Kansas City.—Dredging.—Curtis Hill, City Engr., let contract Geo. H. Siedhoff Construction Co. for temporary work in straightening and widening Turkey Creek; work to extend from 27th St. south to State line at Rosedale, Kans.

S. C., Charleston.—Interlocking Plant.—Southern Ry. Co., W. H. Wells, Ch. Engr. Constr., Washington, D. C., will install mechanical interlocking plant where Edisto River Lumber Co.'s railway crosses Charles-

ton Division of Southern at Embrace near Branchville.

Tex., Freeport.—Levee.—State contemplates constructing levee from near Brazoria to Freeport townsite levee; Arthur A. Stiles, State Reclamation Engr., prepared blueprints and estimates as follows: Length, 16½ mi.; base, 70 ft.; height, 14 ft.; crown, 8 ft.; estimated cost \$185,000; require 1,234,000 yds. of dirt. Jas. E. Ferguson, Governor.

Tex., Houston.—Dredging.—City let contract L. T. Gaylord to dredge Turning Basin; appropriated \$50,000; Ben Campbell, Mayor. (Lately noted.)

Tex., Houston.—Wharf, etc.—City let contract Horton & Horton of Houston at about \$139,000 to construct wharf, cotton sheds and railroad tackage on north side of Houston ship channel near turning basin; to L. T. Gaylord at about \$50,000 for dredging at turning basin so as to deepen channel at site of new wharf and warehouse; Southern Engine & Pump Co. to construct 2 elevated tanks at turning basin, to cost \$7000; 600 to 800 ft. wharves and warehouses; 3 cotton sheds 750x125 ft., with concrete floors and walls and sheet-iron roofs; total expenditure \$300,000, including \$95,000 for purchase of 42.26 acres fronting on channel. (Lately noted.)

Va., Danville.—Southern Ry. Co., W. H. Wells, Ch. Engr. Constr., Washington, D. C., is installing automatic signal system and will also construct mechanical interlocking plant, provided with power-house and distant signals, electric locks and annunciators; 40 levers.

Va., Charlottesville.—Interlocking Plant.—Southern Ry. Co., W. H. Wells, Ch. Engr. Constr., Washington, D. C., lately noted to construct automatic block signals, will also install large interlocking plant at Charlottesville; mechanical type, with power-house and distant signals and electric locks and annunciators; 48 levers.

### MISCELLANEOUS ENTERPRISES

Ala., Anniston.—Construction.—Lacy Construction Co., capital \$12,000, inceptd.; Silas Lacy, Pres. Treas.; Wilmer Lacy, Gen. Mgr. and Secy.

Ala., Gadsden.—Abattoir.—Louis Carson of Gadsden and Will Carson of Piedmont, Ala., will build abattoir and cold-storage plant; concrete building; concrete floors; tankage system; electric or steam power; contemplate installing 80 H. P. boiler and 120 H. P. steam engine; cost \$15,000 to \$18,000.

Ark., Little Rock.—Grain Elevator.—Weinmann Milling Co., 522 E. Markham St., is reported to build grain elevator.

D. C., Washington.—Cleaning.—Sunshine Cleaning Co., capital \$6000, inceptd. by Harry Viner (Prop. Viner's Cleaning & Dye Works, 3219 Mt. Pleasant St. N. W.), F. W. MacKenzie and A. V. Anderson.

Fla., Ocala.—Corn Elevator.—Louis R. Chazel & Sons Co. will build corn elevator with capacity of 10,000 bus.

Fla., Okeechobee.—Fishing.—Chesapeake & Gulf Fisheries Co. of Kansas City, Mo., is reported to have let contract R. E. Steele of Okeechobee to build fishery; 40x50 ft.; 2 stories.

Ga., Augusta.—Incinerator.—City let contract T. O. Brown & Son of Augusta to build incinerator in Sixth Ward; daily capacity, 25 tons; cost about \$9000.

Mo., Kansas City.—Iron and Steel Preserving.—Iron & Steel Preserving Co., capital \$50,000, inceptd. by J. W. Berry, F. C. Gay and A. R. Gibson.

Mo., Kansas City.—Cleaning and Dyeing.—Higby Cleaning & Dyeing Service, C. V. Higby, 2828 Main St., Pres. and Gen. Mgr., let contract to Geo. H. Seidhoff Construction Co., Finance Bldg., Kansas City, to erect 150x32-ft. building of combination construction and 60x40-ft. fireproof structure; cost \$15,000; plans by Smith, Rea & Lovitt, Finance Bldg.; has let contract for cleaning and dyeing and hoe repairing machinery. (See Machinery Wanted—Heating (Indirect Steam) Plant.)

Mo., Kansas City.—Laundry.—Bachelors' Laundry, 2016 Broadway, let separate contracts (lumber to Lee & Lyman and excavating to J. D. Hamrick) and is progressing with erection of lately-noted 50x130-ft. 2-story laundry; cost \$30,000; plans by Madeira & Birdsall, 832 Reserve Bank Bldg., Kansas City; install machinery (electrical), cost \$12,000.

N. C., Charlotte.—Mechanical Engineering.—Alexander & Garsed, capital \$100,000, inceptd. by S. B. Alexander, Jr., and E. T. Garsed.

N. C., Weldon.—Wood Preserving.—A. C. House Lumber Co. contemplates building

small wood-preserving plant. (See Machinery Wanted—Wood-preserving Equipment.)

Okla., Oklahoma City.—Construction.—Central States Construction Co., capital \$100,000, inceptd. by John R. Hose, J. R. Eldridge, G. C. Jones and A. G. Ritz.

Okla., Pemeta.—Crusher Plant.—Pemeta Rock Co., 714 Majestic Bldg., Oklahoma City, Okla., inceptd.; capital \$10,000; W. R. Crusoe, Pres. and Mgr.; Dan Riddpath, V.-P.; Fred E. Thomas, Secy. Treas.; operate crusher plant, cost \$25,000.

Tenn., Bristol.—Abattoir.—Bristol Abattoir Co. increased capital from \$25,000 to \$30,000.

Tenn., Cookeville.—Publishing.—Herald Publishing Co., capital \$35,000, inceptd. by E. L. Wirt, R. H. Wirt, Katie B. Wirt and O. K. Holladay.

Tex., El Paso.—Dairy.—S. H. Whitney of Jennings, Okla., will establish dairy.

Tex., Mission.—Laundry.—W. T. Wiley will build laundry; purchased equipment.

Tex., Victoria.—Incinerator.—City will build incinerator; cost \$7000; J. H. Fleming, Mayor.

W. Va., Bluefield.—Laundry.—Sam Matz, H. H. Barnes and E. T. Tyree of Bluefield, H. F. Watkins of Greensboro, N. C., and others will incorporate company with \$25,000 capital to operate laundry; will erect 3-story addition to Matz Laundry to contain 3000 sq. ft. floor space; install machinery costing about \$7000; Ed Shuffelbarger of Bluefield has construction contract at about \$7000.

### MISCELLANEOUS FACTORIES

Ala., Birmingham.—Cigars.—Gaines-Powers Cigar Co., capital \$2500, inceptd. by Wm. L. Gaines, B. F. Powers and H. F. Waters.

Ala., Gadsden.—Mattresses and Springs.—Nadler Mattress & Spring Bed Co. will be name of company lately noted organizing to manufacture mattresses and springs; building plans not settled; will install machinery, cost about \$3000. (See Machinery Wanted—Mattress Machinery, Materials, etc.)

Ga., Atlanta.—Tubes.—Compression Inner Tube Co., capital \$10,000, inceptd. by S. S. Bush, S. A. Culberson, Geo. F. Berry and Monroe Bush.

Ga., Atlanta.—Inked Fabrics.—B. D. Emanuel of Muncie, Ind., will establish branch plant to operate as Georgia Ribbon & Carbon Co.; leased top floor Moore Bldg. and will install 4-unit plant. (Lately noted.)

Ga., Americus.—Ice Cream.—E. G. Pass, Fitzgerald, Ga., will establish factory to have daily capacity 250 gals. ice cream; leased building; operate as Americus Sanitary Ice Cream Co.

Ga., Lafayette.—Creamery.—D. N. Keown, J. R. Ponder and others are promoting erection of co-operative creamery to cost \$5000.

Ga., Savannah.—Shipbuilding Plant.—L. R. Akin, State Senator, State House, Atlanta, Ga., offered amendment to constitution to provide ten-year tax exemption for any shipbuilding plant that may be established in Georgia with \$3,000,000 or more capital; reports state he has definite information of capitalists planning investment exceeding \$3,000,000 to establish plant at Savannah or Brunswick. Further particulars not now available.

Ky., Louisville.—Hiro Mfg. Co., capital \$20,000, inceptd. by S. E. Barnwell, H. T. Gratz and E. H. Kurtz.

Ky., Paducah.—Springs and Mattresses.—Nashville Spring & Mattress Co., Nashville, Tenn., leased Beyer Bldg. at 211-213 S. 3d St. and will equip as spring and mattress factory.

Ky., Paducah.—Medicine.—Harold Pharmaceutical Co., capital \$10,000, inceptd. by B. E. Finley and J. W. Groham, both of Paducah, and C. H. Deitz of St. Louis, Mo.

Md., Baltimore.—Pharmaceutical Specialties.—J. F. Hancock & Son, 4 S. Howard St., let contract to Chas. H. Brooks, 923 N. Carey St., to erect \$12,000 building at 521 W. Lombard St. for light manufacturing; 21 ft. 7 in. by 103 ft.; ordinary brick; steel sash; slag roof; double (maple) floors.

Md., Baltimore.—Lozak.—Armen Co. is having plans prepared by Minor Bros., 224 W. Pratt St., Baltimore, for Lozak laboratory on 20th St., near Maryland Ave. (Lately noted.)

Md., Baltimore.—War Munitions.—Bartlett-Hayward Co., Fred. H. Wagner, Ch. Engr., Scott and McHenry Sts., has Russian war munitions contract exceeding \$12,000,000; this may soon be largely increased; will build plant to manufacture these munitions; engaged Alton S. Miller of Humphries & Miller, Engrs., New York, as consulting

engineer for new works; let general building contract to J. Henry Miller, inc., Easton and Franklin Sts., Baltimore; structural materials contract awarded to American Bridge Co., 30 Church St., New York; will erect 2-story 42x71½-ft. structure, costing \$50,000, for machine shop; 1-story 33½x17½-ft. building, costing \$118,000, for boiler and forge shop; equip with new machinery; establish shipping department on river front at Dundalk. (Lately noted to build war munitions plant, etc.)

Md., Baltimore.—Calcium Carbide.—Shawigan Electro-Products Co., P. H. Falter, Gen. Mgr., U. S. Fidelity & Guaranty Bldg., let contract Guarantee Construction Co., 140 Cedar St., New York, to build plant at Orangeville; main building, 55x70 ft., 1 story high, of steel and corrugated iron, and equipped with elevators, chutes and machinery to manufacture calcium carbide; under separate contracts are electric overhead monorail system and electric furnace; total cost \$150,000; initial daily capacity 40 tons silica rock, 20 tons coke and 40 tons iron ore; output to calcium carbide. (Lately noted.)

Md., Frederick.—Hardware.—Enterprise Hardware & Mfg. Co., Harry L. Ebert, Pres., will build plant to manufacture hardware; building to be 1 story, brick and metal; manufacturing department 100x60 ft.; other rooms 75x30 ft. and 100x60 ft.

Md., Easton.—Creamery.—Talbot Ice-Cream Co. will build creamery; install machinery to pasteurize milk and manufacture ice-cream and butter; also facilities for milk storage and cooling.

Md., Fairfield.—Asphalt.—United States Asphalt Refining Co. having tentative plans prepared for additions to increase capacity; may expend several hundred thousand dollars; recently completed \$50,000 improvements, increasing daily capacity from 1600 to 1600 tons asphalt.

Mo., Kansas City.—Killey-Carswell Mfg. Co., capital \$2000, inceptd. by P. L. Killey, F. L. Carswell and Marion S. Rousey.

Mo., Kansas City.—A. L. Richtmyre Mfg. Co., capital \$10,000, inceptd. by Arthur L. Richtmyre, Raymond W. D. Jones and Leon G. Richtmyre.

Mo., St. Louis.—Chemicals.—Aniline Products Corp., capital \$2000, inceptd. by Clinton E. Udell, John J. Morse, J. D. Johnson and others.

Mo., St. Louis.—Flavoring Extracts.—W. B. Wood Mfg. Co., capital \$30,000, inceptd. by W. B. Wood, Florence Doelling and I. H. Gamble.

Mo., St. Louis.—Tires.—Jefferson Tire Co., capital \$2000, inceptd. by Stephen C. Rogers, Walter U. Kennedy and Otto F. Karbe.

Mo., St. Louis.—Macaroni.—Randazzo Macaroni Mfg. Co., capital \$10,000, inceptd. by Antonio L. Randazzo, Sam Guerda and Jos. N. Randazzo.

Mo., St. Louis.—Radiator Filler Gap.—H. S. H. Mfg. Co., capital \$10,000, inceptd. by Harry A. Hood, Garrard Strode and Philip G. Hoffman.

Mo., St. Louis.—Hats.—St. Louis Hat Body Mfg. Co., capital \$30,000, inceptd. by David Higson, A. J. Kessinger and Thos. Crossley.

N. C., Charlotte.—Bottling.—North Carolina Mentha-Pepp Sales Corp., capital \$10,000, chartered by J. D. Chandler, Jr., R. O. Tingley and C. W. Norman.

N. C., Durham.—Bakery.—Peerless Bakery Co., A. P. Poole, Prop., will occupy building on Main St.; plans by Gilbert C. White, owner, of Durham; Contr., I. G. Lawrence, Durham.

Okla., Oklahoma City.—Glass Caskets.—American Glass Casket Co., 100½ N. Broadway, organized; T. C. Hamilton, V.-P., Hamilton, Okla.; W. L. Peck, Secy. Treas., Oklahoma City; will establish plant with daily capacity 500 caskets; will open proposals in 5 to 6 months on \$100,000 ordinary construction building from 200 to 300 ft. square; architect not selected; install machinery, cost \$50,000; date of opening machinery bids not set. (Lately noted inceptd., \$225,000 capital.)

S. C., Columbia.—Granite.—American Granite Co. of Rion, S. C., will establish plant to manufacture builders' and monumental stone; 100x40 ft.; electrical machinery; secure granite from quarries at Rion.

Tenn., Chattanooga.—Cheese, etc.—Chattanooga Pure Food Co., E. J. Bedoit, Pres., will build plant to manufacture cheese and other milk products; erect 4 buildings; 1 will be 1 story, brick, 125x60 ft., for factory; other buildings for storage; cost about \$15,000. (Lately noted inceptd.)

Tenn., Dyersburg.—Bakery.—Henning & Walton will rebuild baking plant reported burned at estimated loss of \$1500.



al build-  
ne, En-  
struc-  
Amer-  
v York;  
re, con-  
y 32.5  
r boiler  
er front  
ild war

Shawin-  
Falter,  
y Bldg.,  
Co., 16  
lant at  
1 story  
n, and  
machin-  
y; under  
verhead  
40 tons  
as from  
(Lately

terprise  
Ebert,  
e hard-  
ck and  
x60 ft;

-Cream  
chinery  
re ice-  
r milk

tes As-  
plans  
capac-  
ousand  
mprove-  
m 100

Prod-  
linton  
on and  
W. B.  
d. by  
I. H.

re Co.,  
ogers,  
Mac-  
d Jos.

-H. S.  
Harry  
Hoff

Body  
David  
assley.

Caro-  
10,000,  
Ting-

bakery  
build-  
White,  
rence,

ets.-  
Broad-  
Ham-  
Okla-  
daily  
posals  
con-  
ance-  
inery,  
bids  
capd-

Gran-  
to ent-  
; se-

ntia-  
rest,  
and

ory;  
\$15-

ng &  
orted

Tenn., Johnson City—Chemicals.—Cinch-  
field Products Co., Henry A. Kaufman,  
Supt., will build chemical plant reported to  
cost about \$500,000; erect 3 buildings—160x120  
ft., 60x30 ft. and 60x180 ft.; manufacture  
various chemicals from feldspar.

Tenn., Johnson City—Chemicals.—Cinch-  
field Products Co., Henry A. Kaufman,  
Supt., will build chemical plant; manufac-  
ture barium chloride, barium dioxide, blank  
fls. etc., used in manufacture of colors, dyes  
and enameling; products are manufactured  
from feldspar mined in Western North Car-  
olina; erect 3 buildings, 160x120 ft., 60x300  
ft. and 60x160 ft., of brick or concrete con-  
struction; initial investment about \$250,000,  
and developing investment of about \$500,000.

Tenn., Memphis—Vinegar.—Burgie Vine-  
gar Co., capital \$75,000, inceptd. by John C.  
Meister, Paul M. Johnson, Lee Winchester  
and others.

Tenn., Nashville—Biscuits.—Tennessee Bis-  
cuit Co. (Geo. R. Gillespie and others) let  
contract M. A. Lightman & Co. for founda-  
tion of factory building, 100x200 ft.; will in-  
stall equipment to manufacture crackers  
and cakes; daily consumption capacity of  
125 bbls. (Lately noted inceptd. with \$100,000  
capital.)

Tex., Clinton—Creamery.—Clinton Cream-  
ery Co., capital \$12,000, inceptd. by E. M.  
Boring, H. L. Quillet and B. M. Campbell.

Tex., Dallas—Spring Beds.—Daltex Spring  
Bed Co., capital \$20,000, inceptd. by R. L.  
Marshall, H. R. White and W. W. Walker.

Tex., Dallas—Plumbing Supplies.—L. Wolf  
Mfg. Co. will increase capital to \$200,000;  
leased building at Preston St. and Pacific  
Ave.; will remodel and enlarge at cost of  
\$500; erect additional story, making struc-  
ture 3 stories and basement, with floor  
space of 30,000 sq. ft., and expend about  
\$500 to construct display-rooms on 1st floor.

Tex., Kerrville—Bakery.—Chas. Schreiner  
will erect brick building to be equipped by  
Wm. Murphy as bakery.

Tex., Houston—Moncrief-Lenoir Mfg. Co.,  
capital \$125,000, inceptd. by J. A. Moncrief,  
W. F. Lenoir and W. H. Taylor.

Tex., San Saba—Marble.—Green Marble  
Co., capital \$100,000, inceptd. by C. R. Green,  
R. S. Crain and H. E. Draper.

Va., Danville—Bottling.—Danville Christo  
Cola Bottling Works, capital \$30,000, inceptd.  
by A. Baroudy, J. M. D. Barrier (V.-P. and  
Mgr.) and G. W. Frix.

Va., Norfolk—Electric Welding.—Virginia  
Electric Welding Co. (lately noted inceptd.)  
continues operation of electric-welding  
plant. (See Metal-working Plants.)

W. Va., Kenova—Sanitary Fixtures.—Sani-  
tary Mfg. Co., capital \$300,000, inceptd.; O.  
M. Bake, Pres.; H. R. Wyllie, V.-P.; D. E.  
Abbott, Treas.; John T. Davis, Secy. and  
Gen. Mgr.; will absorb Sanitary Mfg. Co. of  
Hamilton, O.; acquired portion of old In-  
dependent Steel Co.'s plant; will manufacture  
sanitary fixtures, including bathtubs, lav-  
atories, etc.; plant will include brass foundry,  
machine shop, pottery, assembling,  
rooms and enameling department.

## MOTORS AND GARAGES

Ark., Pine Bluff—Automobiles.—F. G.  
Smart Automobile Co., capital \$15,000, inceptd.  
by Ethel S. Smart, J. C. Cone and W. C.  
Hudson.

Ark., Pine Bluff—Automobiles.—F. G.  
Smart Auto Co., capital \$15,000, inceptd.; Mrs.  
Ethel Smart, Pres.; J. C. Cone, V.-P.; F. G.  
Smart, Secy.-Treas.

Ga., Cartersville—Garage.—L. B. Womels-  
dorf and D. Martia will erect garage and  
machine shop.

Ky., Paducah—Garage.—Foreman Auto-  
mobile Co. will build garage; 2 stories; 143x  
215 ft.; first story of plate glass; private  
power and lighting system and heating  
plant; estimated cost, \$35,000.

Md., Baltimore—Automobile Line.—Public  
Auto Service Line, capital \$100,000, organized  
by Ralph F. Nolley (Pres.) Nolley Adver-  
tising Agency, 104 Light St.), Maurice E.  
Landauer and Howard M. Emmons. Mr.  
Nolley is Pres.; will operate automobile line  
from Mt. Washington to center of city.

N. C., Burlington—Automobiles.—Burling-  
ton Auto Co., capital \$10,000, inceptd. by F.  
L. Williamson, W. M. Baker and L. E. At-  
water.

N. C., Charlotte—Automobile Accessories.  
Carolina Automobile Supply House, 221-223  
N. College St. (lately noted inceptd.), capital  
\$50,000, has contracted for remodeling  
building; wholesale automobile accessory  
business; jobbers to North and South Caro-  
lina; Jos. G. Fitzsimons, Pres. and Gen.

Mgr.; Wm. A. Graham, V.-P.; Wade A.  
Montgomery, Secy.-Treas.

N. C., Elkin—Automobiles.—Elkin Motor  
Co., capital \$30,000, inceptd. by E. F. McKee,  
Alex. Chatham, Jr., W. W. Whitaker and R.  
H. Chatham.

N. C., Graham—Automobile Repairs.—Grah-  
am Motor Car Co. let contract to T. G.  
Nicholson, Graham, to erect \$3000 building;  
99 ft. 8 in. by 41 ft. 4 in.; rafters rest on  
steel beams; install machinery (purchased)  
for repair work.

Okla., Oklahoma City—Assembling Plant.  
Ford Motor Co., Detroit, Mich., purchased  
site on which to build plant; 6 stories;  
190x250 ft.; cost about \$65,000. (Lately  
noted.)

Okla., Tulsa—Automobiles.—Automobile  
Sales Co. (lately noted inceptd., capital  
stock \$20,000) will occupy salesrooms in  
building at 2d St. and Detroit Ave.; brick  
and steel; 100x140 ft. \$18,000 structure, with  
tar and gravel roof and concrete floor; vac-  
uum-steam heat; electric lighting; concrete  
curb walks; E. D. Mitchell, owner, Ne-  
braska Bldg., Tulsa, will receive subbids on  
portions of work; construction to begin  
Sept. 1; plans by M. C. Cross, Room 30 Ne-  
braska Bldg.

Tex., Austin—Automobiles.—Thomson  
Motor Car Co., capital \$15,000, inceptd. by G. A.  
C. Half, E. J. H. Lanham and R. M. Thom-  
son.

## ROAD AND STREET WORK

Ala., Cloverdale—City voted \$30,000 bonds  
to improve streets and construct sanitary  
sewer system. Address The Mayor.

Ala., Geneva—Geneva county will grade,  
drain and surface with sand-clay part of  
Hartford and Wicksburg Rd., beginning at  
Hartford; expenditure \$4616.25; W. S. Kel-  
ler, State Highway Engr., Montgomery.  
(See Machinery Wanted—Road Construction.)

Ala., Huntsville—City let contract Gulf  
Paving Co. of Chattanooga, Tenn., to pave  
section of W. Clinton St. with sheet asphalt.

Ala., Linden—Marengo county will con-  
struct gravel and clay roads; bids until  
Aug. 9; \$120,000 appropriated; A. L. Hasty,  
Chmn. County Commrs. (See Machinery  
Wanted—Road Construction.)

Ala., Tuscaloosa—Tuscaloosa County Com-  
missioners let contract W. D. Wade and T.  
W. Wright at \$17,564.12 to construct 4½ mi.  
State-aid road on Greensboro Rd. and same  
amount on Crabbe Rd.; clay foundation  
with gravel surface; later county will add  
turpentine or bituminous binder. (Call for  
bids lately noted.)

Ala., Thomasville—Clarke county will  
grade, drain and surface with sand-clay  
part of Thomasville and Linden Rd. and  
part of Thomasville and Selma Rd.; bids  
until Aug. 31; expenditure, \$15,579.26; W. S.  
Keller, State Highway Engr., Montgomery.  
(See Machinery Wanted—Road Construction.)

Ala., Town Creek—Lawrence county will  
construct 2 mi. macadam road leading east  
from Town Creek; invites bids; W. S. Kel-  
ler, State Highway Engr., Montgomery.  
(See Machinery Wanted—Road Construction.)

Ark., Benton—City, W. A. Utley, Mayor,  
will grade 30 blocks street; cost \$2000; will  
let contract.

Ark., Conway—City will pave streets in  
Paving Dist. No. 4; B. T. Deal and others,  
Commrs.

Ark., Conway—Board of Improvement  
Dist. No. 2 let contract F. U. Halter and  
R. B. McCulloch of Conway for paving with  
concrete; let separate contracts for curbing,  
excavation and drainage.

Ark., Perryville—Perry County Commrs.  
contemplate construction of 30 mi. road;  
cost \$80,000.

D. C., Washington—District Commrs. let  
contract R. J. Beall Construction Co., 734  
15th St. N. W., Washington, to pave 7700 sq.  
yds. with granite block.

Fla., Fort Menden—City will pave 30,000 sq.  
yds. streets; vitrified brick, asphaltic con-  
crete, bitulithic or other pavement, com-  
plete with curbs, gutters and drainage; Bond  
Trustees receive bids until Aug. 17; H. S.  
Jaudon Engr. Co., Consult. Engr., P. O. Box  
582, Savannah. (See Machinery Wanted—  
Paving.)

Fla., Miami—Ocean Beach Co. let con-  
tract to pave about 2 mi. of streets on  
Ocean Beach with coraline rock from Miami  
Canal; later may treat pavement with sand  
and oil method.

Fla., Fort Myers—Lee county will vote  
about Sept. 10 on \$350,000 bonds to construct

road from Fort Myers to Dade county line;  
propose to abandon \$177,000 bond issue pre-  
viously noted; C. W. Stevens, Attorney for  
County Commrs.

Fla., Tallahassee—City, A. H. Williams,  
Clerk, asks bids until Sept. 9 on lately-noted  
paving, curbing, grading and storm drain-  
age on certain streets; Isham Randolph &  
Co., Engrs., Heard Bldg., Jacksonville, Fla.  
(See Machinery Wanted—Paving, etc.)

Ga., Bainbridge—Decatur County Commrs.  
contemplate construction of 100 mi. road;  
cost \$10,000.

Ga., Leesburg—Lee County Commrs. will  
construct 15 mi. road. (Lately noted voting  
\$27,000 bonds.)

Ga., Ocala—Irwin county withdrew offer  
for election (previously noted for July 15)  
on \$20,000 bonds for road construction.

Ky., Hartford—Ohio county, W. C. Blank-  
iship, Clerk, let contract to Graham &  
Smith, Garfield, Ky., to construct 3¼ mi. mac-  
adam road; cost about \$20,000. (Lately  
noted.)

Ky., Louisville—City will pave 34th St.  
from Rowan to Walnut St., 6 blocks, with  
asphalt; estimated cost, \$28,500. Address  
Board of Public Works.

Ky., Monticello—Wayne county, J. S. San-  
dusky, County Judge, withdrew bond elec-  
tion for roads. (Previously noted to vote  
July 21 on \$200,000 bonds to build 75 mi. road  
within next 2 or 3 yrs.)

Ky., Williamsburg—Whitley county, E. F.  
White, Clerk, will receive bids until Aug. 9  
for construction and drainage of previously-  
noted 18 mi. road between Williamsburg and  
Corbin; separate bids on construction and  
drainage; H. F. Davis, County Road Engr.  
(See Machinery Wanted—Road Construction;  
Pipe.)

Ky., Winchester—Clark County Commrs.  
contemplate reconstruction of 2 roads under  
State-aid law; cost \$28,000.

La., Amite—Tangipahoa Parish Police  
Jury let contract Spencer Fendelson of  
Ponchatoula and J. W. Walker of Madison-  
ville to construct 7½ mi. and 1½ mi., re-  
spectively, of dirt roads.

La., New Orleans—A. G. Thomas is lowest  
bidder to construct road from Chef Menteur  
to Rigolets, involving placing of 600,000 cu.  
yds. earth; A. G. Ricks, Commr. of Public  
Finances. (Call for bids lately noted.)

Md., Baltimore—Patrick Flanagan & Sons,  
120 E. Lexington St., are lowest bidders at  
about \$39,000 to pave with sheet asphalt  
Gold St. from Calhoun St. to Druid Hill Ave.  
on 5-in. concrete base, Hillen St. from Falls-  
way to Ensor St., and East St. from Pay-  
ette to Low St. on 6-in. concrete base; R.  
Keith Compton, Chmn. and Consult. Engr.  
Paving Com. (Call for bids lately noted.)

Md., Hagerstown—Washington county will  
construct 2.41 mi. State-aid highway between  
Downsville and Spillman's Station; bids  
until Aug. 13; Barry M. Hartle, County  
Clerk. (See Machinery Wanted—Road Con-  
struction.)

Md., Rockville—U. S. Dept. of Agriculture,  
D. F. Houston, Secy. of Agriculture, Wash-  
ington, D. C., asks bids until Aug. 10 for  
bituminous surface treatment (experimental  
work) of Falls Rd. from Rockville to Poto-  
mac, Montgomery county; 5.4 mi. long, 15  
ft. wide. (See Machinery Wanted—Road-  
surface Treating.)

Md., Westminster—Carroll County Com-  
missioners let contract Thomas Bennett &  
Hunter at \$11,685 to construct 1.46 mi. State-  
aid highway upon or along Hocksville Rd.  
between Hampstead and Hocksville. (Call  
for bids lately noted.)

Miss., Clarksdale—City will improve  
streets; 8000 lin. ft. combined curb and gut-  
ter, 1000 sq. ft. driveway and 1200 sq. ft.  
concrete walk; City Commrs. receive bids  
until Aug. 10; W. S. Boho, Gen. Supt. (See  
Machinery Wanted—Paving.)

Miss., Jackson—Hinds county, Second  
Dist., voted \$15,000 bonds to construct roads.  
Address County Commrs. (Lately noted.)

Mo., Palmyra—Marion County Court will  
expend \$7000 on river road north from Ralls  
county line to corporate limits of Hannibal;  
improve 1½ mi.

Mo., Poplar Bluff—City will construct 6500  
sq. yds. concrete pavement with Dolanway  
wearing surface; estimated cost \$9618; bids  
until Aug. 16; Edw. C. Thomas, City Engr.  
(See Machinery Wanted—Paving.)

N. C., Bryson City—Swain County High-  
way Com. let contract Wright-Johnstone  
Contracting Co. of Andrews, N. C., to con-  
struct 11 mi. road; T. M. Howerton, Engr.  
(Call for bids lately noted.)

N. C., Dobson—Surry county, Siloam  
township, will open bids Aug. 2 to construct

lately-noted roads; \$25,000 available; C. C.  
Matthews, Siloam, N. C., in charge.

N. C., Durham—City will construct about  
3000 sq. yds. pavement; bids until Aug. 6 on  
sheet asphalt on concrete base and concrete  
pavement between and adjacent to car  
tracks; B. S. Skinner, Mayor; H. W. Kueff-  
ner, City Engr. (See Machinery Wanted—  
Paving.)

N. C., Southern Pines—City will construct  
about 2000 sq. yds. granolithic sidewalks; A.  
M. Clarke, Town Clerk, receives bids until  
Aug. 14. (See Machinery Wanted—Paving.)

N. C., Wadesboro—City contemplates pav-  
ing street and sidewalk between business  
section and Union Station. Address The  
Mayor.

Okla., Kenton—Cimarron county, J. O.  
Ellis, Clerk, contemplates several miles road  
construction.

Okla., Lawton—Comanche County Com-  
missioners contemplate improving 100 mi.  
road; cost \$5000; S. A. Joyner, County Engr.

Okla., Okmulgee—City will construct  
about 55 blocks concrete paving; open bids  
in about 4 weeks; A. F. Seider, Engr.; late-  
ly reported to cost \$55,000. (See Machinery  
Wanted—Paving.)

S. C., Kingstree—City, W. R. Scott, Mayor,  
will construct about 700 sq. yds. paving;  
cost \$600.

Tenn., Rutledge—Grainger County Court  
will consider calling election to vote on  
\$200,000 bonds to construct roads.

Tenn., Memphis—City will pave 8. Main  
St. from Linden to Calhoun Ave. with wood  
block; estimated cost \$30,000; J. H. Weather-  
ford, City Engr.

Tenn., Spring Hill—City, Wm. Hughes,  
Mayor, will make street improvements cost-  
ing from \$9000 to \$12,000; open bids Aug. 7;  
bonds previously noted. (See Machinery  
Wanted—Paving.)

Tex., Abilene—Taylor county defeated pre-  
viously-noted bond issue for road construc-  
tion.

Tex., Corpus Christi—City let contract  
Texas Bitulithic Co. of Dallas for 88,000 sq.  
yds. bitulithic pavement; cost \$257,000; Roy  
Miller, Mayor.

Tex., Lampasas—City will construct about  
8 mi. sidewalks; cement; width 4 ft. Ad-  
dress The Mayor.

Tex., Port Lavaca—City voted \$17,000 bonds  
to improve streets. H. C. Innis, Mayor.  
(Lately noted.)

Tex., Seguin—Guadalupe county, Road  
Dist. No. 2, will construct 2 gravel roads;  
Commrs.' Court receives bids until Aug. 2;  
F. E. Hess, Engr., 1604 Southwestern Life  
Bldg., Dallas. (See Machinery Wanted—  
Road Construction.)

Tex., Temple—City plans to expend \$300-  
000 additional for street paving. Address  
The Mayor.

Va., Independence—Grayson County Com-  
missioners contemplate construction of 80  
mi. road at cost of \$150,000.

Va., Norfolk—City let contract Louis Law-  
son of Norfolk to pave streets; W. H. Tay-  
lor, City Engr.

W. Va., Charleston—City will grade, curb  
and pave Lewis St. from Ruffner Ave. west  
to end of paving, Ruffner Ave. from Jack-  
son to Lewis St., Delaware Ave. from Vir-  
ginia St. to Columbia Blvd., etc.; B. A.  
Wise, City Engr., receives bids until Aug. 9.  
(See Machinery Wanted—Paving.)

W. Va., Hinton—Summers county, Talcott  
Dist., votes Aug. 23 on \$100,000 bonds to con-  
struct roads and bridges. J. M. Carden,  
County Clerk. (Lately noted.)

W. Va., Huntington—Cabell county, D. I.  
Smith, Pres. County Court, let contracts  
to grade about 5 or 6 mi. road, cost about  
\$15,000, to U. G. Shippe, Barboursville, W.  
Va.; Hatfield Construction Co., Huntington,  
and Mumow & Ross, Huntington.

## SEWER CONSTRUCTION

Ala., Cloverdale—City voted \$30,000 bonds  
to construct sanitary sewer system and im-  
prove streets. Address The Mayor.

Ark., Argenta—City, J. P. Faucette,  
Mayor, asks bids until Aug. 11 on two 14,000-  
gal. sewerage pumps and two 60 H. P. mo-  
tors; sewerage construction to amount of  
\$300,000 previously described and progress-  
ing. (See Machinery Wanted—Pumps (Sew-  
erage); Electric Motors.)

Ark., Heber Springs—City Council ac-  
cepted plans and specifications for sewer  
system and water-works; estimated cost,  
\$80,000. Address The Mayor.

Fla., Ocala—City has plans and specifica-  
tions by J. B. McCrary Co. of Atlanta, Ga.,  
for sewer system.

Ga., Atlanta.—City votes Sept. 16 on \$3,258,000 bonds for municipal improvements; \$1,000,000 for sewers and disposal plants; \$750,000 for water-works department; \$133,000 for fire department; \$1,000,000 for schools, and \$375,000 for Grady Hospital; R. M. Clayton, Ch. of Construction. (Lately noted.)

Mo., Fayette.—City has had surveys made by W. B. Rollins, Engr., Kansas City, for sewer system estimated to cost \$44,300, including all trunk lines and district sewers, 2 septic tanks and 2 sets filter beds. (Lately noted.)

Mo., Poplar Bluff.—City will construct previously noted sewers in Sewer Dist. No. 2; about 27,000 ft. 6 to 12-in. vitrified pipe, duplex ejector outfit, 35 manholes; estimated cost \$17,425; bids until Aug. 16; Edw. C. Thomas, City Engr. (See Machinery Wanted—Sewer Construction.)

N. C., Ayden.—City votes Aug. 20 on \$15,000 bonds to construct sewer system. Address The Mayor.

Okla., Claremore.—City votes July 27 on \$25,000 bonds to construct storm sewers. Address The Mayor.

Okla., Sand Springs.—City will let contract about Aug. 15 to construct 2 mi. sanitary sewers and 1800 ft. storm sewers; estimated cost \$4408; E. M. Latimer, Engr.; A. J. Shultz, Town Clerk.

Okla., Tulsa.—City will construct sanitary sewer system in Sewer Dist. No. 100, including inlets, manholes, etc.; bids until Aug. 9; T. C. Hughes, City Engr. (See Machinery Wanted—Sewer Construction.)

S. C., Greenville.—City will construct sanitary sewer extension; 19,000 lin. ft. 8-in. sewers, 65 manholes, 15 flush tanks, 1000 cu. yds. rock excavation, pipe, etc.; bids until Aug. 10; John B. Marshall, Mayor; C. P. Ballenger, City Engr. (See Machinery Wanted—Sewer Construction.)

Tex., Port Lavaca.—City voted \$16,500 drainage bonds. Address The Mayor.

#### TELEPHONE SYSTEMS

Ala., St. Stephens.—McCluer Lumber Co., Lewis Naval Stores Co. and others are promoting construction of telephone system from St. Stephens to Chatham.

Ark., Benton.—Southwestern Telephone & Telegraph Co. plans to rebuild exchange; cost \$10,000; place all wires in cables, using about 16,000 ft. cable and 250 poles.

Tenn., Chattanooga.—Cumberland Telephone & Telegraph Co. (main office, Louisville, Ky.) is reported to have appropriated \$12,800 to enlarge underground wire conduit system.

#### TEXTILE MILLS

Ala., Birmingham.—Cotton Goods.—Avondale Mills will install 22,000 tape drive clutch spindles, picking machinery, drawing, slubbers, intermediates, roving equipment, etc.; has contracted for this new additional equipment.

Ala., Eufaula.—Cotton Goods.—Cowhee Cotton Mills does not contemplate making lately-reported additions to plant; recently installed some new spinning and speeder frames.

Ga., Columbus.—Cotton Goods.—Georgia Mfg. Co. will erect and equip second story to dye plant and warehouse, allowing increase in dye plant, lapping-room and opening-room; cost about \$8000; C. M. Barlow, Contr.

Ga., Forsyth.—Cotton Goods.—Forsyth Cotton Mills organized by R. P. Brooks, J. W. Newton, G. O. Persons and R. T. Persons; purchased Star Cotton Mills and will install new equipment to replace old machinery; has let contract.

Ky., Maysville.—Cotton Cloth.—Maysville Cotton Mills will erect addition, reconstruct dyehouse and rebuild burned cotton shed; J. E. Serrine, Archt.-Engr., Greenville, S. C., prepared plans and is receiving bids; after bids are received will decide on extent of construction. (Lately noted.)

N. C., Asheboro.—Hosiery.—Acme Hosiery Mill will erect addition to plant to double capacity.

N. C., Concord.—Cotton Goods.—Norcott Mills Co., authorized capital \$250,000, incptd. by F. J. Haywood and W. B. Broadfoot of Concord and C. W. Johnston of Charlotte; will build cotton mill; ordered machinery. (Mr. Haywood and others noted in May as to form company.)

Tenn., Fayetteville.—Yarn.—Elk Cotton Mills will erect building, 150x125 ft., to be equipped with 5000 additional spindles; for

additional power will probably utilize exhaust into low-pressure steam turbine; estimated cost, \$90,000; J. E. Serrine of Greenville, S. C., is Archt.-Engr. (Reported in Sept., 1914, as to be built, but construction was deferred.)

Tenn., Murfreesboro.—Knit Goods.—Board of Trade interested in promoting establishment of knitting mill, capital \$100,000 to \$150,000; investigating relative to operation. (See Machinery Wanted—Knitting Mill Equipment.)

Tenn., Soddy.—Hosiery.—Richmond Hosiery Mills, Rossville, Ga., let contract Mark K. Wilson Co., Chattanooga, to build 1-story 100x50-ft. mill and 40x18-ft. power-house; concrete floors; construction cost \$5500; J. D. Alsop, Archt., Chattanooga. (Lately noted to establish branch mill.)

Tex., Cuero.—Cotton Duck.—Gudalupe Cotton Mills will build addition; concrete foundation with walls of frame, brick and glass; gravel roof; install 5 carding machines, 4 spinning frames and 32 looms.

#### WATER-POWER DEVELOPMENTS

Mo., Warrensburg.—Sam-Hout Water-Power Development Co., capital \$4000, incorporated by B. T. Sams, W. H. Hout and D. D. Corum.

#### WATER-WORKS

Ala., Ashland.—City, H. L. Adair, Mayor, let contract at about \$12,900 to Roberts & Wilkes, Macon, Ga., for water-works construction, consisting of 150,000-gal. earth reservoir, small pump-house, 250-gal. motor-driven pump and 4 mi. water mains. (Bids lately noted; Edgar B. Kay, Engr., Tuscaloosa, Ala.)

Ark., Heber Springs.—City Council accepted plans and specifications for water-works and sewer system; estimated cost, \$80,000. Address The Mayor.

Fla., Flvay.—Flvay Improvement Co. having plans prepared for 10,000-gal. tank and tower and pumping machinery for water-works; Hiram McElroy, Engr., 410½ Franklin St., Tampa, Fla. (See Land Developments.)

Ga., Atlanta.—City votes Sept. 16 on \$750,000 bonds for water-works department; lately noted; R. M. Clayton, Ch. of Constr. (See Sewer Construction.)

Ga., Caldwell.—City voted \$3000 bonds for water-works and electric-light improvements. Address The Mayor.

Md., Elkton.—Maryland Water Co. will issue \$40,000 bonds to extend water system and otherwise increase operations.

Md., Shaft.—Shaft Water Co. will construct water line from dam at Middlethian to Shaft, 10,000 ft.; trench to be 2-ft. deep for 2-in. galvanized pipe; bids until Aug. 19. (See Machinery Wanted—Water-works.)

Md., Westernport.—City, Harry F. Smith, Mayor, will install pipe, hose hydrants, etc. (See Machinery Wanted—Pipe, etc.)

Mo., St. Louis.—City, Edw. E. Wall, Water Commr., will reconstruct Compton Hill reservoir; estimated cost, \$410,000; new capacity, 35,000,000 gals.; concrete reinforced construction; gatehouse building, \$6000; gates and operating devices, \$6000; bids opened Aug. 13; plans by Roth & Steady, St. Louis. (See Machinery Wanted—Reservoir (Concrete).)

N. C., Ayden.—City votes Aug. 20 on \$20,000 bonds to construct water-works. Address The Mayor.

Okla., Caddo.—Board of Trustees, Scott Powell, Prest., rejected lately-noted bids and receives bids until Aug. 10 to construct pump station and filter; brick pump station, 2 oil engines, 2 triplex and 2 centrifugal pumps, settling basins, slow sand filter and reservoir; also 600 ft. 6-in. cast-iron pipe and 1000 ft. 8-in. cast-iron pipe to take up and relay; hydrants, etc.; J. E. Davis, City Engineer. (See Machinery Wanted.)

Okla., Lehigh.—City water-works contract, lately noted let to W. C. Swanwick, Joplin, Mo., includes general water-works extension, mains, etc., brick power-house, oil engines and duplex pumps (purchased); daily capacity 1,000,000 gals.; \$40,000 available; Engr., Benham Engineering Co., Oklahoma City.

Okla., Tulsa.—Horace Speed, representing Sapulpa (Okla.) capitalists, submitted proposition to City Com. to develop well-water system near Bristow, Okla., and pipe water to Tulsa.

Tex., Rangs.—City let contract Chas. Hart & Sons to construct water-works.

#### WOODWORKING PLANTS

Ala., Decatur.—Boxes and Baskets.—Decatur Box & Basket Co., capital \$7000, incptd.; A. D. Jervis, Prest.; W. E. Skeggs, V.-P.; W. F. Boswell, Gen. Mgr.; W. A. Bibb, Secy.-Treas.; succeeds N. B. Hall & Sons' basket factory.

Ark., Camden.—Staves.—Major Stave Co. is reported as planning to build sawmill.

Ark., Camden.—Sashes and Doors.—Rockwell Mfg. Co. increased capital from \$50,000 to \$100,000.

Ark., Hamburg.—Shooks.—G. H. Jones Lumber Co., Snyder, Ark., leased box factory at Hamburg operated as Harnshark Box & Lumber Co.; will remodel buildings, install machinery and specialize in manufacture of shooks.

Ark., Peach Orchard.—Staves.—Walbert Stave Co. organized with T. J. Walbert, Prest.; Wm. Johnson, V.-P.; M. W. Walbert, Secy.-Treas., all of Batesville, Ark.; purchased Mendenhall Stave Co.'s plant at Peach Orchard.

Ark., Texarkana.—National Refrigerator & Fixture Co., capital \$10,000, incptd. by Moritz Reinholdt, Robt. R. Clough, Jas. Barrett and Jones P. Jones.

Fla., Clearwater.—Moldings, Mill Work, etc.—L. S. Swent & Co. operate lately-noted planing mill and novelty works; manufactures moldings, mill work, etc.; building erected and machinery installed.

Ga., Helen.—Spokes, Handles, etc.—Geo. W. Hart will install equipment for manufacture of spokes, handles, singletrees and neck yokes. (Prices on machinery lately noted wanted.)

Ky., Hickman.—Veneer.—Mengel Box Co. (main office, Louisville) will erect building and install additional presses.

La., New Orleans.—Cooperage.—Southern Cooperage Co. will build cooperage and warehouse.

La., New Orleans.—Furniture.—Merchants' Furniture Mfg. Co. is being organized by F. W. Kallenberg; plans to invest about \$10,000.

Md., Baltimore.—National Casket Co., E. Falls Ave. and Lombard St., let contract Chas. L. Stockhausen, Marine Bank Bldg., to erect addition to casket factory; 1 story; 38x153 ft.; brick; fireproof interior; cost about \$15,000.

Mo., St. Louis.—Sashes, Doors and Blinds.—Hafner Mfg. Co. has plans by J. M. Dunham Co., 1018-1022 Chemical Bldg., St. Louis, for plant; 85x120 ft.; 2 stories; brick and concrete; slow combustion; electric elevators; sprinkling system; cost \$20,000; architects are receiving bids.

N. C., Lenoir.—Chairs.—Ethel Chair Co., capital \$100,000, incptd. by B. L. Stone, L. E. Stone and B. F. Williams.

Va., Stuart.—Staves.—J. D. Blackard Stave & Cooperage Co. will install machinery to manufacture slack barrel staves; capacity, about 20,000 blbs.

#### FIRE DAMAGE

Ala., Brundidge.—Lighttower Gin.

Ala., Huntsville.—T. S. Lawler's livery stable, loss \$3000; T. S. Overton's blacksmith shop, loss \$800.

Ala., Tuscaloosa.—W. L. Klutz's residence in Pinehurst.

Ark., Mount Pleasant.—Will Dobbs' residence.

Ark., Nettleton.—J. W. Roy's store; loss \$8000.

Ark., Newark.—W. J. Travis' residence, 3 mi. north of Newark; loss \$3000.

Ark., Searcy.—Searcy Steam Laundry, owned by E. A. Robbins, J. S. Sanford and Edward Lightie; loss \$6000.

Fla., Brooksville.—Two buildings owned by W. S. Jennings; building occupied by C. C. Peck Cash Grocery and owned by W. D. Parsons of New York; loss \$10,000.

Ga., Columbus.—Curt Bldg., occupied by Wills & Thomas and Scarborough Shoe Co.; loss \$35,000.

Ga., Waynesboro.—Dwellings of Robert Blount and Geo. Williams.

Ky., Elizabethtown.—Meathouse, storeroom and servants' quarters of Bethlehem Academy in Hardin county; loss \$7000.

Ky., Middlesboro.—Charles Wilson's residence; loss \$4000.

Md., Howardsville.—John E. Neal's residence; loss about \$3000.

Miss., Sumrall.—J. J. Newman Lumber Co.'s Mill No. 2, machine shop, drykilns and 80,000 to 100,000 ft. lumber; estimated loss \$200,000.

Mo., Kennett.—Lasswell Lumber Co.'s planing mill; loss \$30,000 to \$35,000.

Mo., Moselle.—William Morre's store; J. E. Pipkin's building; Ed Cole's building; loss about \$25,000.

Mo., St. Louis.—Gilmore Bonfig Decorating Co.'s building at 4116 Olive St., owned by Gerard Strode; loss on building \$9000.

Mo., University, Sta. St. Louis.—Jas. J. Quinn's residence at Forsythe Blvd. and Ashbury Ave., University City; loss \$10,000.

Mo., Waynesville.—Pulaski county jail, Address County Commrs.

N. C., Dunn.—Hotel McLeod; loss \$10,000.

N. C., Wentworth.—Colored Baptist Church. Address The Pastor.

S. C., Anderson.—John R. Snelgrove's residence at 1601 S. Main St.; loss \$3700.

S. C., Clinton.—Bailey Bros.' store; loss \$50,000.

S. C., Drake.—W. B. Drake's mill and gin; loss \$4000.

Tenn., Chattanooga.—E. R. and J. W. Lawless' store at 240 E. Main St.; loss on building \$3000 to \$4000.

Tenn., Dyersburg.—Henning & Walton's baking plant; estimated loss \$1500.

Tenn., Hohenwald.—J. R. Williams' residence.

Tenn., Lewisburg.—Fayette Wolaver's dwelling on Springplace pike, occupied by R. B. Doud; loss \$4000.

Tenn., Nashville.—One-story building at Grace and 1st Sts., owned by Sam Hirschkovitz and occupied by Joe Hirschkovitz Dry Goods Co.; loss on building about \$5000.

Tenn., Paris.—Maxwell House, operated by J. E. Maxwell and owned by Bob Fryer of Cincinnati; loss \$5000 to \$6000.

Tex., Belton.—Ed. Graves' dwelling, 2 mi. from Belton; loss \$6000.

Tex., Bonham.—Baker Haisell Livery Co.'s warehouse.

Tex., Brenham.—Andrew Hahn's dwelling; loss \$3000.

Tex., Krum.—Krum Mill & Elevator Co.'s plant; estimated loss, \$50,000.

Tex., Laredo.—Arthur dwelling, occupied by J. W. Mussett; loss \$8000.

Tex., Marshall.—Dwellings of Charles Ford, Walter Ford and Samuel Ford; loss \$1100, \$2100 and \$3200, respectively.

Tex., Mexia.—Houston Texas Central R. R.'s passenger station; W. G. Van Vleck, Gen. Mgr., Houston, Tex.

Tex., Nacogdoches.—W. T. Wilson Grain Co.'s warehouse; loss \$7500.

Tex., Paris.—Mrs. W. S. Moore's residence on Bonham St.; loss about \$4000.

Tex., Temple.—Will H. Grazier's residence; loss \$3500.

Tex., Temple.—W. S. McGregor's dwelling; loss \$5000.

Tex., Waco.—Residences of Woodson T. White and Mrs. S. A. Easley; loss \$10,000.

Tex., Wooten Wells.—Wooten Wells Water Co.'s 2 hotels, sanitarium, 5 cottages and water tower, property owned by I. A. Goldstein, George Robinson, C. J. Glover, Jr., and Ed McCullough of Waco, Tex.; loss \$25,000.

Va., Blantons.—W. L. Blanton & Bros.' store and stock of goods with outbuildings; loss about \$16,000.

W. Va., Herndon.—Camp Creek Coal & Lumber Co.'s band-saw mill.

W. Va., Martinsburg.—Building occupied by Berkley Storage Co.; loss \$4000.

#### Invites Suggestions.

Suggestions from all users of metal ceilings and side walls as to any new design that they may have in mind are invited by the Ohio Corrugating Co. of Warren, O., so as to enable it to issue when completed a catalogue illustrating these products, which will be in harmony with the desires of both ceiling erectors and their customers. The catalogue will be ready for distribution about October 1, and the company is anticipating a large number of inquiries for the first edition. It is the intention of the Ohio Corrugating Co. to manufacture a full and complete line of metal ceilings and side walls, in addition to the different commodities in tin andterne plates, black and galvanized sheets. Also all forms of roofings and sidings in galvanized, painted and special terne-coated sheets, eaves trough, conductor pipe, ridge roll and accessories will be made.



## BUILDING NEWS

## BUILDINGS PROPOSED

## APARTMENT-HOUSES

D. C., Washington.—Mrs. Stanley McCormick opens bids Aug. 18 to erect apartment-house at 18th St. and Mars Ave.; 99x110 ft.; steel frame and stone construction; tile roof; asbestos roof on steel beams; vapor heat; electric light; cost \$350,000; J. H. de Sibus, Archt., 1002 Hibbs Bldg., Washington. (Previously noted.)

Ga., Atlanta.—S. R. Crawford will erect 3-story apartment-house; cost \$40,000; Haralson Blackley, Archt., Atlanta; Mr. Crawford and W. H. Wyne also reported to erect three apartment-houses on 4th St.

Ga., Atlanta.—C. Shelverton is erecting apartment-house and dwellings. (See Dwellings.)

Ga., Atlanta.—Geo. Gordon has plans by H. J. D. May, Atlanta, for apartment-house; cost \$30,000; 3 stories. (Noted in July.)

Fla., Jacksonville.—L. L. Meggs is having plans prepared by W. Mulford Marsh, 403 Main St., Jacksonville, for apartment-house; 2 stories; brick veneer and stucco; composition roof; hardwood floors; tiled bathrooms and porches; gas; cost \$8000 to \$9000; bids due in about 2 weeks.

Ga., Savannah.—Dancy estate has plans for stores and apartments. (See Stores.)

Mo., St. Louis.—Henry G. Zumsteg purchased site on Hartford St. east of Louisiana Ave. and will erect flat building.

Mo., St. Louis.—Chas. C. Stewart will erect 3 double flats of 3 rooms each, with baths, on Melroe Ave. west of Lawrence St.; furnaces; hardwood floors; electric lights; construction begun under supervision of Anderson-Stoeck-Buermann Co.

Mo., St. Louis.—Mrs. Nellie C. Moran will erect double 3-room flat, with baths, on McRee Ave. west of Lawrence St.; furnace.

Mo., St. Louis.—Frank J. Fendler will erect 2 flats on Devonshire Ave. in Southampton.

N. C., Wilmington.—Oscar Pearsall has plans by J. F. Leitner, Wilmington, to remodel Colonial Inn for apartments; 10 suites; steam heat; electric elevator.

Tex., El Paso.—J. E. Neff will erect brick tenement-house in Magoffin addition; 29.6x12x15 ft.; cost \$3000.

Tex., Laredo.—Laredo National Bank will erect bank and office building on Market Plaza; 2 or 3 stories; fireproof; faced with brick and cream-glazed terra-cotta; cost about \$28,000; Adams & Adams, Archts., San Antonio. (Noted in July.)

W. Va., Charleston.—DeWitt Gallaher will erect apartment-house at 14 Broad St.; about 65x115 ft.; semi-fireproof; 3 stories; cost \$45,000; construction to begin March, 1916. (Previously noted.)

## ASSOCIATION AND FRATERNAL

Ala., Ensley.—Ensley Lodge No. 957, B. P. O. E., is having plans prepared by Wm. Leslie Welton, Birmingham, for addition to lodge building; 40x90 ft.; 2 stories; brick; composition roof; hardwood floors; furnace and gas radiator heat; electric lighting; cost about \$5000. (Noted in June.)

Ala., Huntsville.—Helson Lodge No. 1, A. F. and A. M., will erect temple.

Fla., Lakeland.—W. D. McRae will erect Woodmen of the World Bldg. (See Stores.) N. C., Durham.—State Grand Lodge, Royal Knights of King David, W. G. Pearson and others, Com., will not erect building within year. (Lately noted.)

Tex., Galveston.—Galveston Lodge No. 9 and Island City Lodge No. 56, Knights of Pythias, contemplate erecting building on Winnie St. between 21st and 22d Sts.; probably 3 stories; cost \$15,000 to \$20,000.

W. Va., St. Albans.—A. F. & A. M. has plans by David Dick, Charleston, W. Va., for store and lodge building; 2 stories; brick and terra cotta; cost \$25,000; bids received Aug. 15.

## BANK AND OFFICE

Md., Baltimore.—Public Service Building Co. organized with \$2,500,000 capital stock to finance building and maintenance of office building at Lexington and Liberty Sts. for Consolidated Gas Electric Light & Power Co., Herbert A. Wagner, Pres., and others; organization not completed; company to be controlled by Gas company; \$900,000 first mortgage 5 per cent. bonds; \$700,000 6 per

cent. preferred stock; \$3000 common; plans of building expected completed about Aug. 11; ask for bids Aug. 15; work begins about Sept. 1; building to be 18 stories; fireproof; cost about \$1,300,000; Parker, Thomas & Rice, Archts., 1109 Union Trust Bldg., Baltimore. Harry E. Karr, agent. (Lately noted having plans prepared. Other details previously noted.)

Mo., St. Louis.—Mercantile Trust Co. is considering erecting addition to bank building; cost not less than \$200,000.

N. C., Plymouth.—Geo. W. Harney has plans for store and office building. (See Stores.)

S. C., Charleston.—Charleston Building & Investment Co. is reported to have plans by J. D. Newcomer, Charleston, to erect bank building; 26x84 ft.; 2 stories; brick and stone; tin roof; hot-water heat; cost \$29,000; bids opened Aug. 2.

S. C., Saluda.—Bank of Saluda will erect building at Main and Church Sts.

Tenn., Chattanooga.—Volunteer State Life Insurance Co., A. L. Key, V-P. and Gen. Mgr., will erect office building; site 137x199 ft.; building not less than 10 stories; frame steel or reinforced concrete; fireproof. (Lately reported Barnwell & Barnwell, Archts., Chattanooga; cost about \$400,000.)

Tex., Dallas.—Merchants' National Bank of Dallas will change front.

Tex., El Paso.—International Brick Mfg. Co. will erect office building; construction of materials manufactured by company.

Va., Petersburg.—Sol and Morris Cooper and Louis Leavitt are reported to erect five-story office building; lower floor for stores.

W. Va., Charleston.—Dr. A. H. Boyd has plans by Paul Eagan, Charleston, for 3-story brick, stone or terra cotta bank and office building on State St.; cost \$40,000.

## CHURCHES

Ala., Birmingham.—Handley Memorial Church has plans by C. Evans, American Trust Bldg., Birmingham, for building.

D. C., Washington.—Episcopal Cathedral opened bids to erect apse; Geo. A. Fuller Co., 1123 Munsey Bldg., Washington, low bidder; Arthur B. Heaton, Wilkins Bldg., Washington, and Henry Vaughn, Boston, Archts. (Noted in July as having bids.)

Ga., Lindale.—Methodist congregation plans to erect building; cost about \$5000; Massachusetts Mills are reported interested.

Ga., Macon.—Mulberry Street Methodist Church will expend about \$8000 to enlarge building; balcony to seat 200 to 300. Address The Pastor.

Ky., Elkton.—Methodist church will erect \$3500 parsonage. Address The Pastor.

La., New Orleans.—Rev. John D. Foulkes, S.J., is reported to have purchased site in Gentilly Ter. for erection of retreat (several buildings) for Jesuit Fathers; brick; 450-ft. frontage on Franklin Ave.; 50 bedrooms, with private bath; cost \$50,000; Bacich & DeMuntluzin, Archts., 216 Baronne St., New Orleans.

Md., Arlington.—Wilton Heights M. P. Church has plans by Owens & Sisco, Continental Bldg., Baltimore, for addition to building; 50x60 ft.; cost about \$20,000; bids due Aug. 9; contractors estimating are Cowan Building Co., 106 W. Madison St.; E. G. Turner, Bateman Ave.; C. C. Watts, 407 E. 25th St.; B. F. Bennett Building Co., 123 S. Howard St.; R. H. Frazier & Son, 224 W. Mulberry St.; C. W. Littleton & Son, 413 Liberty Heights Ave.; G. Walter Toveil, Eutaw and McCulloch Sts.; J. M. Perrygo, Merville and Linwood Aves., all of Baltimore. (Lately noted.)

Md., Mt. Airy.—Methodist Episcopal Church, Rev. Chas. E. Ely, pastor, contemplates erecting stone building; cost \$20,000.

Miss., Philadelphia.—J. H. Hester, A. De-wees and J. F. McCauley, Comm., receive bids until Aug. 9 to erect frame building for Methodist congregation; plans and specifications on file with committee.

Mo., Kansas City.—Visitation Church will erect building at 5137 Main St.; 112x56 ft.; brick and stone; cost \$50,000; Owen & Payson, Archts., Kansas City.

N. C., Engelhard.—Methodist church, Rev. W. P. Constable, pastor, Lake Landing, N. C., has plans by H. C. Linthicum & Son, Durham, N. C., for building lately noted; main

auditorium 40x60 ft.; Sunday-school-room 40x40 ft.; brick; tin roof; hardwood floors; acetylene gas lighting; art-glass windows; cost \$7000; receiving bids; expects to begin construction Sept. 1; has plans by same architects to improve church building at Lake Landing; is installing front; extending roof; placing concrete pillars, steps and floors to extend across front; repaint; probably install new pews; present improvements to cost about \$2000; later will install memorial windows, etc.; cost when completed about \$4500. Address The Pastor.

N. C., Lake Landing.—Methodist Episcopal Church South is improving building. (See Engelhard, N. C.)

Okla., Enid.—Presbyterian congregation, Mr. Fleming, Chrmn. Building Comm., Enid National Bank Bldg., is having plans prepared by Cannon & Horton, 234 Beck Bldg., Enid, for addition to Sunday-school-room, making this part of church 2 stories; 40x50 ft.; pressed brick and Oklahoma granite; mill construction; composition roof; pine floors; cost \$5000; construction begins about Sept. 1. Address architects. (Lately noted.)

S. C., Walterboro.—Catholic church will erect building on Hampton Ave. Address The Pastor.

Tenn., Springfield.—Methodist church will erect parsonage; cost \$10,000. Address The Pastor.

Tenn., Tullahoma.—First Baptist Church, Rev. C. A. Ladd, pastor, will remodel and enlarge building; extend 40 ft. back; install sliding doors between old and new parts, etc.

Tex., Chillicothe.—O. H. Dodson, Chrmn. of Comm., receives bids until Aug. 9 to erect church building; 75x104 ft.; brick with stone trimmings; galvanized-metal shingle roof; wood floors; cement sidewalks; cost \$18,000; hot-air heat, about \$750; electric lighting; R. H. Stuckey, Archt., Chillicothe. (Lately noted.)

Va., Norfolk.—H. H. Little is reported interested in erecting Episcopal church in Algonquin Park section.

W. Va., Charleston.—First Methodist Episcopal Church South has plans by H. Rus Warne, Charleston, for interior finish of 1½-story and basement brick and stone church at Washington and Dickinson Sts.; bids received about Aug. 15.

W. Va., Summit Point.—Methodist Episcopal Church South will erect building; brick; 42x68 ft.; W. B. Conrad, Chrmn. of Building Com.

W. Va., Warwood.—Methodist church will erect church and Sunday-school building; cost \$50,000. Address The Pastor.

W. Va., Williamstown.—Episcopal Church is receiving competitive sketches for 2-story stone church; cost \$10,000.

W. Va., Williamstown.—Presbyterian Church let contract to Chas. Dowling & Co., Williamstown, to erect building; 60x80 ft.; stone and brick; tile roof; electric light; heating separate; cost \$20,000; A. Breitenitz, Archt., Address Contr.

## CITY AND COUNTY

Ala., Dothan.—Fire Station.—City will remodel old city hall for fire station; pressed brick and stone front; cost \$4000. Address The Mayor.

Fla., Pensacola.—Fire Station and Stables. Board of Commrs. receives bids until Aug. 9 to erect fire station and city stables; information, plans, etc., from Bldg. Inspec. Room 202 City Hall; C. Alfred, Archt., Pensacola; A. Greenhut, Mayor. (Noted in July.)

Ga., Albany.—Auditorium.—City opened bids to erect auditorium; lowest bidders are as follows: General contract, Pike Bros. Lumber Co., LaGrange, Ga., at \$40,413; electric wiring, Electric Service Co., Albany, \$2990; plumbing, Eastman Plumbing Co., Albany, \$4297; A. Ten Eyck Brown, Archt., Atlanta. (Lately noted.)

Ga., Columbus.—Jail.—Muscookee County Commrs. are having plans prepared by C. F. Hickman, Columbus, for jail addition; accommodations for 30 prisoners; L. A. Scarbrough, Chrmn. of Board.

Tenn., Johnson City.—Market-house and Courthouse.—City votes Sept. 2 on \$37,500 to erect courthouse and \$25,000 to erect market-house. Address The Mayor.

Tenn., Lexington.—Jail.—Henderson County will erect jail to replace present structure; cost \$6500. Address County Commrs.

Tenn., Springfield.—Jail.—Robertson County Commrs. will enlarge and improve jail.

Tex., Houston.—Rice Warehouse.—City will erect rice warehouse. (See Warehouses.)

## COURTHOUSES

N. C., Kinston.—Lenoir County will probably vote on \$100,000 bonds for courthouse. Address County Commrs.

Okla., Perry.—Noble County Commrs. are considering plans by J. H. Hawk, Oklahoma City, for courthouse; 76x98 ft.; 4 stories; fireproof; cost \$100,000. (Previously noted.)

Okla., Stillwell.—Adair county defeated \$40,000 bonds to erect courthouse and jail. (Lately noted.)

Tenn., Johnson City.—City votes Sept. 2 on \$37,500 to erect courthouse. (See City and County.)

Tex., Houston.—Harris county will remodel courtrooms for County Court at Law and Eightieth Dist. Court; Frank H. Meyer, Archt., Houston; H. L. Washburn, County Auditor.

Tex., San Diego.—Commrs. Court revoked election on \$100,000 bonds for courthouse. (Lately noted.)

## DWELLINGS

Ala., Alabama City.—Dwight Mfg. Co. will expend \$18,000 to erect residence for cotton-mill employees; contract let in August.

Ala., Birmingham.—W. A. J. Kopp has plans by Salie & Merwinney, Birmingham, for residence; stone veneer.

Ala., Mobile.—Robt. H. Smith will erect 2-story dwelling at Ann and Selma Sts.; cost \$5500.

Ala., Mobile.—F. R. Sales will erect 6-room cottage on Flo Claire St.; cost \$4000.

D. C., Washington.—Harry Wardman, 1430 K St. N. W., Washington, is having plans prepared by M. A. Schneider & Co., same address, for dwelling on 16th St., near Scott circle; 3 stories; brick and stone; cost about \$20,000.

D. C., Washington.—Arthur C. Merriam, 1726 Park Rd., has plans by Samuel R. Turner, 1112 7th St. N. W., Washington, to erect 4 dwellings on 16th St. S. E. between A and B; 13.6x45 ft.; brick; tin roof; pine floors; Latrobe heaters; gas lighting. Address owner, who is subletting contracts. (Lately noted.)

D. C., Washington.—Mrs. Kate V. Daly opens bids Aug. 9 to erect dwelling at 16th and Meridian Sts.; plans by A. B. Mullett & Co., Union Trust Bldg., Washington, call for structure 3 stories; cost about \$10,000. (Noted in July to have rejected previous bids.)

D. C., Washington.—Arthur Carr, 1101 E St. N. W., will erect dwelling at 4306 Georgia Ave. N. W.; 2 stories; brick; cost \$3700; construction by owner.

D. C., Washington.—Walter C. Branshears, 22d St. and Queens Chapel Rd., will erect dwelling at 5604 16th St. N. W.; 2 stories; frame; cost \$7000; construction by owner.

D. C., Washington.—Wm. H. Ritchie, 317 Colorado Bldg., Washington, will erect dwelling at 5514 Broad Branch Rd.; 1½ stories; cost \$4000; construction by owner.

D. C., Washington.—Lelfur Magnusson, 2009 H St. N. W., will erect dwelling at 2223 Northampton St. N. W.; 2 stories; cost \$4000; construction by owner.

Fla., Jacksonville.—A. C. Hamilton will erect dwelling on Oak St. between Barrs and King Sts.; 2 stories; brick veneer; cost \$5500.

Ga., Albany.—R. H. Ferrall has plans by M. J. Reidy and J. T. Murphy, Albany, for 7-room bungalow; frame; wood shingle roof; double floors with hardwood surface; city lighting; cost about \$2700, exclusive of plumbing and lighting; construction begun under supervision of J. & W. L. Davis. (Lately noted.)

Ga., Atlanta.—Jas. L. Logan and Hamilton Douglas are reported to erect number of bungalows at Rosedale Park.

Ga., Atlanta.—C. Shelverton, 619-30 Fourth National Bank Bldg., is erecting five 1-story residences, one 2-story brick veneer dwelling, 7-room bungalow and brick-veneer double apartment; steam and hot-air heat; slate and composition roofs. (Lately noted to erect bungalow.)

Ga., Atlanta.—Adair & Weinmeister will erect 2-story frame dwelling at 54 Fairview Ave.; day labor.

Ga., Atlanta.—Hugh Dorsey is reported to erect residence on Wesley Ave. and Muscookee drive in Peachtree Park Heights section of Fulton county.

Ga., Augusta.—Mrs. Francis A. Hunt will erect residence at Gary and Gardner Sts.; cost \$6000.

Ga., Dawson.—John H. Perry has plans by Thos. M. Walker, Opelika, Ala., for dwell-

ing; 1 story; frame; press-brick front; shingle roof; tile porch; tile baths; hardwood floors; electric lighting contracts for construction, plumbing and heating let Aug. 2; cost \$3000 to \$3500.

Ga., Macon.—Odom Realty Co. is erecting 2 dwellings on Cherokee Heights; brick veneered.

Ga., Savannah.—Mrs. John Morris is erecting dwelling at Abercorn and 40th Sts.; 2 stories.

Ky., Lexington.—J. W. Ferguson, Paris, Ky., has plans by John V. Moore, Lexington, for residence in Mentelle Park; 8 rooms; cost \$4000.

Ky., Louisville.—E. R. Moore will erect stucco dwelling at 2136 Alta Ave.; cost \$3800.

Md., Baltimore.—Frank O. Singer, Jr., 600 Equitable Bldg., acquired 4 lots on Brookfield Ave. and Brooks Lane and will erect dwellings; Wm. B. Gerwig, Archt., 600 Equitable Bldg., Baltimore.

Md., Baltimore.—Jas. B. Yeatman, 4742 Pimlico Blvd., will erect 12 dwellings on Wylie Ave. near Pimlico Rd., Edgewood Park; 2 stories; hardwood floors; steam heat.

Md., Baltimore.—Rochester Kirkness Realty Co., 2738 Harford Ave., is reported to erect 150 dwellings on the Alameda between Harford Rd. and Garrett property; 2 stories; porch fronts; cost about \$500,000.

Md., Baltimore.—Jas. Keely, Poplar Grove and Mosher Sts., has plans by Jacob F. Gerwig, 1028 N. Fulton Ave., Baltimore, for 12 dwellings on Dukeland Ave., near Riggs Ave.; 2 stories; brick; about 14x45 ft.; cost about \$18,000; construction by owner.

Md., Rogers Station, P. O. at Stevenson.—Joseph P. Kennedy, Presl. of Kennedy's foundry, Charles and Wells Sts., Baltimore, acquired site on Green Spring Ave. near Rogers Station and will erect residence; semi-bungalow style; separate building for dog kennels; L. H. Fowler, Archt., 347 N. Charles St., Baltimore.

Mo., Kansas City.—Andrew Young will erect 2-story stucco dwelling at 5605 Penn St.; cost \$12,000.

Mo., Kansas City.—G. L. Kieffer will erect 2-story frame residence at 453 Kenwood Ave.; cost \$4000.

Mo., Kansas City.—W. H. Collins Investment Co. is reported to erect 16 bungalows on Harrison St.; foundations begun.

Mo., Kansas City.—L. M. Seymour will erect 2-story frame dwelling at 417 W. Fifty-ninth St. Terrace; cost \$4000.

Mo., Kirkwood.—James T. Dodds, St. Louis, will erect 8-room brick bungalow on Riverview drive.

Mo., Kirkwood.—Fred Castle, St. Louis, will erect California-type bungalow.

Mo., Kirkwood.—A. F. Kulgar, St. Louis, will erect 8-room brick bungalow on Riverview drive.

Mo., St. Louis.—Jas. H. Williamson acquired site on Berlin Ave. east of Waterman Way and will erect 7-room dwelling with sleeping porch and solarium; hot-water heat.

Mo., St. Louis.—J. Burns will erect 2 one-story dwellings at 6390-32 Idaho St.; cost \$3600; construction by owner.

Mo., St. Louis.—O. P. Blake, assistant sales manager of Inland Steel Co., is having plans prepared by J. M. Dunham Co., 1018-22 Chemical Bldg., St. Louis, for dwelling and garage in Thornby Pl.; brick with stone trimmings; hardwood finish; 2 sleeping porches; cost \$15,000.

N. C., Asheville.—R. L. Ellis has plans by C. Gadsden Sayre, Anderson, S. C., for dwelling; brick veneer; hot-water heat; cost about \$12,000; day labor.

S. C., Gaffney.—B. L. Hames will erect residence on Limestone St.

N. C., Raleigh.—E. H. Goodwin will erect dwelling on Hillcrest Drive; 2 stories; slate roof; cost \$4000.

S. C., Saluda.—J. J. Wheeler will erect 6-room residence on Jennings St.

Tex., Ballinger.—Mrs. Cleora Smith is reported to erect bungalow on Colorado River about 6 miles from Ballinger; cost \$5000 to \$6000.

Tex., Dallas.—S. P. Brickey, 1122 Busch Bldg., Dallas, has plans by Brickey & Brickey, same address, for residence on Bryan St.; cost \$7000; day labor. Address Owner. (Lately noted.)

Tex., El Paso.—E. L. Torres will erect brick residence in Cotton Addition; 16x35x25 ft.; cost \$5000.

Tex., El Paso.—Wm. P. Brady will not erect dwelling as reported in July.

Tex., El Paso.—Jolly & Morris will erect dwelling at Franklin Heights; 34x44x28 ft.; cost \$8000.

Tex., El Paso.—J. E. Neff will erect brick residence on Kern Pl.; 28x15x28 ft.; cost \$5000.

Tex., Galveston.—John Christensen will erect 2-story frame residence at 17th St. and Ave. O½; cost \$4000.

Tex., Galveston.—B. F. Harriss, 1919 Ave. H, will erect brick-veneer residence at Broadway and 30th St.; 2 stories and basement; 8 rooms and 2 baths; porches; steam heat; cost \$14,000.

Tex., Houston.—E. M. Howard will erect dwelling on Rusk Ave. in Eastwood Addition; 2 stories; 7 rooms; cost \$3100.

Tex., Houston.—George H. Hermann estate will erect 20 4-room cottages on Helmer and Fuller Sts.; cost \$7000.

Tex., San Antonio.—M. Rosenfeld will erect 5-room dwelling on East Ave.; cost \$3400.

Tex., Waxahachie.—J. S. Wyatt has plans by Brickey & Brickey, 1122 Busch Bldg., Dallas, for residence; 2 stories; metal shingle roof; cost \$7500; contract let Aug. 5.

Va., Norfolk.—F. M. Smith has plans by John D. Winn, Norfolk, for residence at Spottswood Ave. and W. Ghent Blvd.; 2 stories and basement; brick and stucco; 30x61 ft. 2 in.; 8 rooms and bath; bids opened Aug. 4.

Va., Richmond.—E. Erdt will erect 2-story brick dwelling on Robinson St.; cost \$587.

Va., Richmond.—W. F. Ganzert will erect 2-story frame dwelling on 3d Ave.; cost \$3000.

Va., Richmond.—Geo. E. Wise will erect dwelling on Semmes Ave. between 41st and 42d Sts., Woodland Heights; 2 stories; cost \$5500.

W. Va., Elm Grove.—J. W. Crumme is reported to erect residence in Elm Court; 2 stories; frame.

W. Va., Parkersburg.—W. H. Dunbar will erect residence on St. Mary's Ave.; 2 stories and basement; brick and hollow tile; slate roof; wood floors; gas heat; 32x45 ft.; cost \$6000; Wm. Howe Patton, Archt., Union Trust Bldg., Parkersburg; construction begun.

## GOVERNMENT AND STATE

Ga., Quitman.—Postoffice.—Treasury Dept., Jas. A. Wetmore, Acting Supervising Archt., Washington, D. C., opened bids to erect postoffice building; Westchester Engineering Co., White Plains, N. Y., is reported lowest bidder at \$38,891 for limestone construction; plans call for 1-story-and-basement structure; brick, terra-cotta and stone faced; partly fireproof; 3650 sq. ft. ground area; composition roof. (Lately noted.)

Md., Baltimore.—Immigration Station.—Treasury Dept., Jas. A. Wetmore, Acting Supervising Archt., Washington, D. C., receives bids until Aug. 16 for construction (except mechanical equipment, elevator, lifts and dumbwaiter) of immigration station, including pipe tunnels, approaches and wharf; 1 four-story, 40x130 ft., for hospital; 1 three-story, 150x207 ft., for receiving and detention building, and 2 two-story buildings, 50x51 ft. and 40x100 ft., for laundry and administration buildings, respectively, of fireproof construction, with slate, tile and composition roofs; brick faced; stone base; stone and terra-cotta trimmings; approximately 43,000 sq. ft. total ground area; wharf 25x280 ft.; wood construction. Bidders are: J. Henry Miller, Eutaw and Franklin Sts.; Irwin & Leighton, Keyser Bldg.; both of Baltimore; Norman Kerr Co., 1123 Broadway; Howard H. Peterson Co., 1328 Broadway; Careton Co., 141 W. 42d St.; Thompson-Starrett Co., 49 Wall St.; Wm. Henderson, Inc.; Connor Bros. Co.; all of New York; P. F. Gormley Co., 617 Union Trust Bldg., Washington, D. C.; Wm. H. Maxwell, H. P. Converse & Co., Boston, Mass.; J. S. Rogers Co., Morristown, N. J.; Wm. H. Jones Contracting Co., Wilmington, Del.; M. Yeager & Son, Danville, Va. (Noted in July.)

Mo., Fulton.—Postoffice.—Treasury Dept., Jas. A. Wetmore, Acting Supervising Archt., Washington, D. C., receives bids until Sept. 7 for construction, complete (including mechanical equipment, lighting fixtures and approaches), of postoffice; 1 story and basement; brick; faced with terra-cotta and stone; 3650 sq. ft. ground area; partly fireproof; composition and tile roof; drawings and specifications obtainable from custodian of site at Fulton, or from office of Supervising Archt.

Md., Indianhead.—Cotton Storehouse.—Bureau of Yards and Docks, Navy Dept., Washington, Wm. M. Smith, Acting Head of

Bureau, opens bids Aug. 28 to erect cotton storehouse at naval proving grounds; corrugated steel construction; plans and specifications to be had of Bureau.

N. C., Charlotte.—Postoffice.—Treasury Dept., Jas. A. Wetmore, Acting Supervising Archt., opens bids Sept. 7 to erect postoffice and courthouse; 2 stories and basement; 1700 sq. ft. ground area; fireproof; stone and brick face; composition and copper roof; plans and specifications to be had of Archt. or custodian of site, Charlotte. (Noted in May to open bids July 2 to erect building.)

Tex., Galveston.—Postoffice.—Treasury Dept., Jas. A. Wetmore, Act. Super. Archt., Washington, D. C., opened bids to remodel postoffice and custom-house; M. C. Bowden, Galveston, Tex., at \$7,933.50, is lowest bidder. (Lately noted.)

## HOSPITALS, SANITARIUMS, ETC.

Fla., Miami.—City will receive competitive plans from local architects until Sept. 1 for hospital building; pavilion type; total cost not to exceed \$115,000; H. G. Ralston of Comm. on Sanitation of City Council, in charge of contest. (Lately noted.)

Ga., Atlanta.—City votes Sept. 16 on bond issue, to include \$375,000 for Grady Hospital and \$1,000,000 for schools. (See Schools.)

Ga., Macon.—Hospital Comm. will improve Macon Hospital building. Address The Mayor.

La., Alexandria.—State Board of Health, Baton Rouge, La., plans to erect tuberculosis sanatorium about 10 mi. south of Alexandria.

Mo., Carthage.—Jasper county voted Sept. 14 on \$100,000 bonds for tuberculosis sanatorium. Address County Commrs.

Mo., St. Louis.—Board of Public Service will erect nurses' dormitory on Robert Koch Hospital grounds; Wm. T. Findly, Secy.

Tex., Galveston.—John Sealy is reported as to expend \$80,000 to improve and erect additions to John Sealy Hospital; alterations to include additional story for each wing and enlargement of clinical facilities.

Tex., San Antonio.—City and Bexar county will open bids Aug. 20 to erect Robert B. Green Memorial Hospital; 4 stories; reinforced concrete and brick; tile partitions and floors; terra-cotta cornice; elevators; cost, complete, \$250,000; Albee B. Ayres and Reuter & Harrington, Archts., San Antonio. (Lately noted to open bids Aug. 1.)

W. Va., Grafton.—City, F. C. Graham, Mayor, votes Aug. 17 on \$15,000 bonds to erect hospital. (Noted in May.)

W. Va., Wheeling.—Ohio County Commrs. will construct infirmary; reported cost \$100,000.

## HOTELS

Ky., Louisville.—Tyler Hotel Co. receives bids through D. X. Murphy & Bro., Archts., Louisville, until about Aug. 20 to erect 10-story addition to Tyler Hotel; reinforced concrete skeleton; brick and terra-cotta exterior finish; cost about \$200,000. (Previously noted.)

Miss., West Point.—H. M. Burt and L. A. Stubblefield, proprietors Florence Hotel, Birmingham, Ala., are reported to erect hotel.

Tenn., Dayton.—Cumberland Springs Hotel Co. was incept. with capital stock of \$30,000; L. I. Powell, Pres.; J. T. Crawford, Secy. and Treas.; will build hotel at Cumberland Springs, near Dayton; 55 rooms, 25 with bath; cost about \$30,000.

Tenn., Memphis.—L. D. Block of Bry-Block Mercantile Co. purchased site at Calhoun Ave. and Mulberry St., 50x50 ft., and is reported considering erection of 5-story brick hotel.

Tenn., Newport.—R. Porter Barnett is reported promoting plans to erect 6-story hotel.

## MISCELLANEOUS

Ark., Blytheville.—Club.—Allan Walton received bids to erect club and store building. (See Stores.)

Mo., Kansas City.—Clubhouse.—Hillcrest Country Club will erect \$50,000 clubhouse; will issue \$40,000 bonds.

N. C., Durham.—Welfare Building.—Golden Belt Manufacturing Co. will erect community building in Edgemont section; to contain auditorium to seat 300, domestic science department, baths, gymnasium, etc.

Tenn., Dayton.—Clubhouse.—H. H. Frasa is interested in organization of country club; will erect clubhouse; 80x80 ft., including porches; wood and concrete construction; shingle roof; pine floors; heating not determined; city electric lighting; cost without equipment, \$2500. (Lately noted.)

Va., Richmond.—Market.—M. B. Florsheim, Propr. Royal Laundry, will build market; stalls; central refrigerating plant; cost \$50,000.

## RAILWAY STATIONS, SHEDS, ETC.

Ga., Macon.—State Railroad Commission authorized Macon Terminal Co. to issue \$1,500,000 bonds and \$100,000 of stock to erect terminal station; plans by Fellheimer & Long, 7 E. 42d St., New York, call for station proper 245x84 ft.; express-room 72x16 ft.; baggage and mail room 72x109 ft.; exterior brick, granite and terra-cotta; interior marble finish; cost of building about \$500,000; with land, track improvements, etc., \$1,100,000. (Noted in March.)

Okla., Durant.—St. Louis & San Francisco R. R., F. G. Jonah, Ch. Engr., St. Louis, and Missouri, Kansas & Texas Ry. Co., F. Ringer, Engr. M. W. Parsons, Kans., are reported to have submitted plans for passenger station; waiting-room 45x45 ft.; cost \$30,000 to \$35,000.

## SCHOOLS

Fla., Eagle Lake.—Board of Public Instruction of Polk County accepted plans by Willis R. Biggers, Tampa, Fla., for school; 4 classrooms and auditorium to seat 250; C. A. Parker, Supt. and Secy. of Board, Bartow, Fla.

Fla., Fort Meade.—Board of Public Instruction of Polk County, Bartow, Fla., receives bids until Aug. 12 (extended date) to erect brick school; 10 rooms; auditorium to seat 1000; plans and specifications at office of C. A. Parker, Supt. of Public Instruction, Bartow, and Willis R. Biggers, Archt., Tampa. (Lately noted.)

Fla., Ozone.—Ozone School Dist. will vote on \$4000 school bonds. Address Dist. School Trustees.

Fla., Port St. Joe.—Special Tax School Dist. has plans by C. F. Streeter, West Bldg., Jacksonville, for school building; 2 stories; brick; 4 classrooms; composition roof; bids opened Aug. 2; cost \$7500; J. D. Parish, Chmn. School Board, Blountstown. (Noted in June.)

Fla., New Smyrna.—School Dist. is having plans prepared by Mark & Sheftall, Clark Bldg., Jacksonville, for school building for colored pupils; cost \$3000; bids being received; C. R. M. Sheppard, Supt. Public Instruction of Volusia County.

Ga., Americus.—Third Dist. Agricultural and Mechanical College is having plans prepared by T. F. Lockwood, Murrah Bldg., Columbus, Ga., for administration and academic building; 2 stories; 140x140 ft.; brick; steam heat; fireproof roofing.

Ga., Atlanta.—City votes Sept. 16 on bond issue to include \$1,000,000 for schools and \$375,000 for Grady Hospital. Address The Mayor. (Lately noted.)

Ga., Augusta.—Richmond County School Board contemplates erecting school building; J. M. Haynie, County Clerk.

Ga., Baconton.—City votes Aug. 19 on \$12,000, to include \$6500 to erect and equip school; J. B. Miller, Mayor. (Lately noted.)

Ga., Caldwell.—City, Hiram Mullis, Treas., voted \$7000 bonds, including \$400 for school building.

Ga., Coolidge.—City votes Aug. 16 on \$6000 bonds to erect school; G. T. Knight, Mayor. (Lately noted.)

Ga., Macon.—Bibb County Board of Education will receive competitive plans from local architects to erect Vineville school; structure to accommodate 700 pupils; 2 stories and basement; 16 classrooms and same number of cloakrooms; reception-room, rest-room, etc.; manual training department in basement; heating and ventilating plant; fire escapes; cost about \$40,000; will consider plans Sept. 1. (Noted in June.)

Ga., Waycross.—Ware county contemplates election on bonds for school improvements, etc.

Ky., Burkesville.—School Board contemplates erecting 5 or 6 schools in county to cost about \$3000.

Ky., Louisville.—Board of Education will construct grandstand at Louisville Boys' High School at Brock and Breckinridge Sts.; 15 tiers; cost about \$15,000.

Ky., Princeton.—City defeated bond issue to erect school building. Address The Mayor. (Lately noted.)

Ky., Shelbyville.—Simpsonville and Veechdale Consolidated School Dist. accepted plans by Gruber & Doss, Shelbyville, for school building; 2 stories; brick; 6 classrooms, auditorium and 2 recitation-rooms.



La., Glenmora.—Trustees have plans by H. J. Duncan, Alexandria, La., for school building.

Md., Baltimore.—Board of Awards recommended contract lately noted let to Fred Decker & Son to erect addition on roof of Western High School and will call for new bids.

Md., Baltimore.—Roland Park School, Roland Park, Md., will erect "daylight"-type school on 40th St. between Roland Ave. and University Parkway; 50x250 ft.; 24 classrooms, assembly hall, gymnasium, shower baths, etc.; Wyatt & Nolting, Architects, Keyser Bldg., Baltimore, will have plans ready in about a month. (Lately noted.)

Md., Catonsville.—Board of Awards received bids until Aug. 11 at office of Richard Gwynn, City Register, City Hall, Baltimore, for erection of additional building at Parental School; drawings and specifications may be seen at office of C. E. Stubbs, Inspector of Buildings, City Hall, Baltimore.

Md., Emmitsburg.—Mt. St. Mary's College has begun construction of building according to plans by Baldwin & Pennington, 601 Professional Bldg., Baltimore, Md.; 185 ft. long, 108 ft. deep at ends, 62 ft. deep in center; wide porch across front between wings; 70 ft. high, with tower extending 30 ft. above top of building; mountain granite trimmed with dressed Woodstock granite; cost about \$150,000; construction by college workmen. (Noted in April.)

Miss., McLain.—Trustees, W. W. Green, Secy., open bids Aug. 9 to erect consolidated school building near McLain; about 55x82 ft.; ordinary brick and frame construction; Barrett specification roof; wood floors; individual heaters; cost \$5,000; Emmett J. Hull, Archt., 222 Daniel Bldg., Jackson, Miss. Address Mr. Green.

Mo., Concordia.—Concordia School Dist. No. 97 has plans by White, Underhill & Dean, Kansas City, Mo., for school in block H; 2 stories and basement; 55x72 ft.; brick; concrete foundation; flat roof, probably gravel; stairs and hall floors cement; other floor wood; steam heat; electric light; cost \$12,000; contract to be let in August. Address Geo. Duensing, Presd. Board, Concordia. (See Machinery Wanted—Building Material.)

Mo., Fulton.—Board of Education called election for Aug. 19 on \$50,000 bond issue to erect high school and \$5,000 to build addition and repair negro school.

N. C., Burlington.—Supt. of Public Schools opens bids Aug. 14 to erect school building; 17x50 ft.; 3 stories; slow-burning construction; slag roof; steam heat; electric lighting; Hill C. Linthicum and H. Colvin Linthicum, Architects, 502-503 Loan and Trust Bldg., Durham, N. C. Address Hill C. Linthicum, P. O. Box 38, Durham. (Lately noted to open bids July 29.)

N. C., Chapel Hill.—School Board, N. W. Wahler, Secy., has plans by C. C. Hook, Charlotte, for school for which \$30,000 bonds were sold.

N. C., Durham.—Durham County Board of Education will erect school in Patterson township.

N. C., Macon.—Building Comm., A. F. Brame, Chrmn., lets contract Aug. 10 to erect school building; brick; 2 stories and basement; 60x90 ft.; 7 classrooms and auditorium; hot-air heat; cost \$10,000; J. M. Kennedy, Archt., Raleigh, N. C.

N. C., Raleigh.—Raleigh township votes Sept. 14 on \$100,000 bonds for schools; Frank M. Harper, Supt. of Schools. (Lately noted to vote Sept. 15.)

Okla., Ringling.—Jefferson County Board of Education receives bids until Aug. 15 to erect school building; 2 stories; brick; 8 rooms; Bedford stone trimmings; fireproof corridors and stairways; cost \$15,000; F. E. Fagerquist, Archt., Oklahoma City. (Noted in July.)

Okla., Dundee.—School Dist. voted \$18,000 bonds to erect school building. Address Dist. School Trustees.

Okla., Edmond.—State Board of Public Affairs, J. M. Aydelotte, Chrmn., Oklahoma City, lets contract Aug. 12 to erect school building; 110x55 ft.; steel and concrete; cost \$50,000; Layton & Smith, Architects, Oklahoma City. (Previously noted.)

S. C., Greenwood.—Greenwood School Dist. No. 18 plans to issue \$35,000 bonds to erect school. Address Dist. School Trustees.

S. C., Middendorf.—Trustees School Dist. No. 38 will erect school building; 4 classrooms with auditorium; brick; slate or galvanized roof; wood floors; cost \$5,000; open bids soon. Address D. M. Rowe, Middendorf. (Lately noted.)

S. C., Townville.—Townville School Dist. will erect school building; 6 rooms with auditorium, manual training and domestic science departments; brick. Address Dist. School Trustees. (District lately noted voting \$5,000 bonds.)

Tenn., Alexandria.—City will erect addition to Lawrence school building. Address The Mayor.

Tenn., Lenoir City.—City votes Aug. 7 on \$5,000 bonds for schools. Address The Mayor.

Tex., Acme.—School Board is having plans prepared by Field & Clarkson, Fort Worth and Wichita Falls, Tex., for school building; cost \$10,000; will receive bids in about 30 days.

Tex., Austin.—Bids received until Aug. 4 by Board of Managers of State Institute for Colored Deaf, Dumb and Blind to erect addition to dining-hall building; plans and specifications at office of W. E. Ketchum, Archt., Austin.

Tex., Austin.—School Board selected Dennis R. Walsh, Austin, to prepare plans for schools, including high school; will appropriate \$100,000 for junior high school and \$115,000 for girls' high school.

Tex., Beaumont.—South Park Ind. School Dist. of Jefferson Co. receives bids until Aug. 14 to erect additions to and alter South Park School, near Beaumont; plans and specifications at office of Sanguinet, Staats & Gottlieb, Architects, First National Bank Bldg., Houston, and J. C. Eisenbraut at South Park School Bldg.

Tex., Corsicana.—City is considering election of \$100,000 bonds for school, street and sewer improvements. Address The Mayor.

Tex., Dallas.—Board of Education approved plans by Wm. B. Ittner, Board of Education Bldg., St. Louis, for Oak Cliff High School; 1 unit to be erected at once to accommodate 600 pupils and cost about \$125,000; will soon advertise for bids for this building and for Winnetka School. (Previously noted.)

Tex., El Paso.—Concordia School Dist. No. 2 awarded contract to H. M. Beutell and Percy W. McGhee, Jr., El Paso, to prepare plans for Grandview and Lincoln Park schools; 1 story and basement; fireproof; 8 rooms; ventilated wardrobes; cost \$20,000 each. (Lately noted.)

Tex., Jefferson.—School Dist. No. 7, G. A. Daugherty, F. Melsenheimer and M. H. Hartsbaugh, trustees, votes Aug. 17 on \$28,000 bonds to erect school building.

Tex., LaPorte.—LaPorte Ind. School Dist. plans to issue \$30,000 bonds for schools. Address Dist. School Trustees.

Tex., McMahan.—McMahan Rural School Dist. will erect high school; 2 stories. Address Dist. School Trustees.

Tex., Pearsall.—School Board will erect school building to cost about \$3500; 4 classrooms, porch, coatrooms, etc.; arranged to convert 2 classrooms into auditoriums; construction to begin within 10 days.

Tex., Wallis.—Wallis School Board receives bids until Aug. 15 to erect brick school; plans and specifications at office of Presd. of Board.

Va., Charlottesville.—City, A. V. Conway, Mayor, voted \$75,000 bonds for schools.

Va., Lynchburg.—Seneca Dist. School Board receives bids until Aug. 9 at office of Heard & Cardwell, Architects, People's National Bank Bldg., Lynchburg, to erect school building at Marysville; 2 rooms.

W. Va., Simpson.—Board of Education will erect 2-story frame grade school addition; cost \$3500; S. W. Ford, Archt., Clarksburg; bids opened July 26.

W. Va., Keyser.—Keyser School Dist. votes Aug. 14 on \$35,000 bond issue to erect school building for colored children. Chas. N. Finnell, Presd. School Board.

W. Va., Shepherdstown.—State Board of Control, J. S. Lakin, Presd., Charleston, W. Va., receives bids until Aug. 23 to erect dormitory for Shepherd College; 95.4x51.6 ft.; 2 stories, basement and attic; brick; slate roof; cement floor in basement; tiled bathrooms; interior wood partitions; H. Rus Warne, Archt., Charleston; plans and specifications may be obtained from State Board of Control. (Lately noted.)

W. Va., Warwood.—Richland School Dist. declared \$50,000 bond issue voted in January void; will soon vote again on same issue; has plans by Fred Faris, Wheeling, for Central Warwood School, fireproof, brick, 10 rooms, gymnasium and auditorium, cost \$40,000; also for Short Creek School, 4 rooms, brick, cost \$10,000. (Noted in March.)

## STORES

Ala., Birmingham.—C. M. Williamson will erect 2-story brick-veneer building on Handover circle; cost \$4500.

Ala., Calera.—O'Neal's Lime Works, C. L. O'Neal, Prop., Eureka, Ala., contemplates erection of business building; 50x125 ft.; 2 stories on first floor; offices on second. (See Machinery Wanted—Store Fronts, Cornices, etc.)

Ark., Blytheville.—Allan Walton received bids to erect building for 2 stores, clubroom on second floor, at 4th and Main Sts.; 2 stories, 50x110 ft.; brick; Carey roof; oak floor, cypress subfloor; hot-water heat; electric light; cost \$10,000.

D. C., Washington.—Chas. W. Fairfax, 1841 R St. N. W., Washington, has bids to remodel business building on 12th St. N. W., near G St.

Fla., Brooksville.—W. S. Jennings, Jacksonville, will rebuild burned structure; 2 stories; brick.

Fla., Lakeland.—W. D. McRae will erect 3-story brick business building to be known as Woodmen of the World Bldg.

Ga., Savannah.—Dancy estate has plans by I. P. Crutchfield, 104 Congress St. East, for building; 3 stories and basement; 50x60 ft.; brick; Barrett specification roof; plate-glass front; tile floor for 2 stories; upper floor for apartments; cost \$10,000.

Md., Baltimore.—Julius Mintz, 814 Equitable Bldg., reported agent for Herbert Jorey, will remodel building at Howard and Fayette Sts. for store purposes; cost \$3500.

Md., Baltimore.—Armen H. Theaumein has plans by B. W. Minor, 224 W. Pratt St., Baltimore, for building at 101-3 Maryland Ave.; 2 stories; 40x60 ft.; brick; slag roof; steam heat; cost \$8000; construction by owner.

Mo., St. Louis.—Jos. J. Foster is having plans prepared by J. M. Dunham Co., 1018-22 Chemical Bldg., St. Louis, for store building at 410 Washington Ave.; 5 stories; fireproof; reinforced concrete and steel; front of masonry face brick with stone and terra-cotta trimmings; copper frames and hardwood finish; high-speed elevators; steam heat; special system of ventilation; cost \$73,000.

N. C., Asheville.—C. B. McIntyre will erect steel business building at Broadway and College St.

N. C., Plymouth.—Geo. W. Harney has plans by B. F. Mitchell, Seaboard Bank Bldg., Norfolk, Va., for store and office building; 2 stories; brick; 60x70 ft.; cost \$12,000.

N. C., Wilmington.—J. Irving Bear has plans by J. F. Leitner, Wilmington, to erect store and office building at Front and Princess Sts.; 3 stories; front of plate glass; 2 stories on ground floor; offices of Tidewater Power Co. on second and third floors; no contract; building to be erected under supervision of builder.

N. C., Winston-Salem.—J. F. Smith acquired building on 5th St. and will remodel; install front of pressed brick and plate glass; Humphreys & Faw, Architects, Winston-Salem.

S. C., Saluda.—J. M. Smith will erect business building in addition to one now under construction; 25x150 ft.

Tenn., Chattanooga.—E. R. and J. W. Lawless will rebuild store noted damaged by fire at loss of \$3000 to \$4000.

## BUILDING CONTRACTS AWARDED

### APARTMENT-HOUSES

D. C., Washington.—Col. Geo. Truesdell let contract to Davis Construction Co., 602 Union Trust Bldg., Washington, to erect apartment-house at Columbia Rd., Wyoming Ave. and 20th St.; 7 stories; 85x184 ft.; fireproof; brick and stone; tile and slag roof; Arthur B. Heaton, Archt., Wilkins Bldg., Washington. Noted in May.)

Ga., Atlanta.—Mrs. Alice E. Timmons let contract to Gude & Co., Grant Bldg., Atlanta, to erect apartment-house at 4th and W. Peachtree Sts.; 18 apartments; 3 stories; brick; tile roof; electric light; cost \$45,000; Horace B. Hammond, Archt., Atlanta.

Ga., Savannah.—A. Sulter let contract to W. T. Hussey, Savannah, to convert 2-story frame residence into apartment-house; electric lights; cost \$3500; Henrik Wallin, Archt., Savannah.

Mo., St. Louis.—W. J. Althaus let contract to A. Hess, St. Louis, to erect 2-story tenement-house at 1735 Pennsylvania Ave.; cost \$6000.

Tenn., Ducktown.—Dr. L. E. Kimsey will erect brick business building at Main and Unaka Sts.; turnkey job.

Tenn., Nashville.—Wilson estate is having plans prepared by Thos. W. Gardner, Nashville, for 3 brick store buildings at 216-18 6th Ave.

Tex., Austin.—E. M. Scarbrough will remodel store building on Congress Ave.; 2 stories; install brick and glass front; cost \$6000.

Tex., Fort Worth.—S. J. Higgs will erect brick store building at 1303-05 W. 7th St.; cost \$10,000.

Tex., Kennedale.—Agent of H. & T. C. receives bids to erect (turnkey job) brick store; 50x75 ft.

Va., Norfolk.—Dr. Geo. H. Rose has plans by Ferguson, Calrow & Wrenn, Norfolk, for store building at Main and Talbot Sts.; brick; 2 stories and basement; bids opened Aug. 4.

Va., Petersburg.—Soll and Morris Cooper and Louis Leavitt are reported to erect store and office building. (See Bank and Office.)

W. Va., St. Albans.—A. F. and A. M. has plans for store and lodge building. (See Association and Fraternal.)

### THEATERS

Tenn., Chattanooga.—Lyric Co., F. H. Dowler, Jr., Mgr., will remodel and improve Lyric Theater; will erect stage, proscenium arch, balcony, etc.

Tex., El Paso.—Grecian Theater will enlarge and improve building; install heating and air-washing system; cost \$6000.

### WAREHOUSES

Fla., Ocala.—Louis R. Vazel & Co. will erect corn warehouse and install machinery for handling corn, corn products and other farm products; capacity 10,000 bus.

La., New Orleans.—Board of Levee Commrs. of Orleans Dist. will erect 1-story brick warehouse.

Md., Baltimore.—C. Warner Storck is having plans prepared by E. H. Glidden, Jr., 1019 Garrett Bldg., Baltimore, for warehouse at Cathedral and Chase Sts.; 50 ft. front.

N. C., Varina.—Varina Improvement Co., G. B. Alford, Presd., incorporated with capital stock of \$100,000; is erecting 3 tobacco prizehouses, 100x50 ft.

Tenn., Tullahoma.—Henry King Co., Murfreesboro, Tenn., will erect warehouse; 48x150 ft.; 2 stories and basement; concrete and brick construction. (See Machinery Wanted—Building Material.)

Tex., Beaumont.—S. P. Kelley has plans by H. C. Maurer, Beaumont, for warehouse at Main, Cypress and Hickory Sts.; 3 stories and basement; 120x240 ft.; fireproof; composition roof on concrete; electric light; cost about \$60,000; bids to be opened in Jan. (Lately noted.)

Tex., Houston.—City will erect rice warehouse on ship channel; 125x500 ft.; cost about \$100,000; Ben Campbell, Mayor.

Tex., Houston.—Sanders & Co. will erect open-shed warehouse on Bremond St.; 42x126 ft.; corrugated-iron roof; 520-ft. railway platform; cost \$2500.

Va., Richmond.—Davis Warehouse Co. acquired building of Davis Wagon Works; will erect addition, install sprinkler system, etc.; cost about \$8000.

Mo., St. Louis.—Edw. F. Telthorst, 4833 St. Louis Ave., let contract to John H. Puseer Realty Co., 206 Title Guaranty Bldg., St. Louis, to erect tenement-house at 2804 Labadie Ave.; 23.6x52 ft.; ordinary construction; composition roof; wood floors; cost \$4900; hot-water heat \$550; Nolte & Nauman, Architects, Fullerton Bldg., St. Louis. Address contractor. (Lately noted.)

N. C., Wilmington.—C. W. Polvogt, 123 N. Front St., let contract to H. Henry Harris, Wilmington, to erect 3 apartments; 20x60 ft.; brick; tin roof; wood subfloors; no heating or lighting; cost \$2250 each; E. F. Grossman, Archt., 418 N. 5th St., Wilmington; construction begun.

Tex., Beaumont.—Edward Lightfoot let contract to J. E. Heartfield, Beaumont, to erect apartment-house at Franklin and Neches Sts.; 2 stories; 16 rooms; ordinary construction; composition roof; wood floors; cost \$8000; C. A. Logan, Archt., Beaumont.

Va., Alexandria.—Wm. E. Fendall, Fendall Bldg., Washington, D. C., let contract to J. D. Knight, Alexandria, to erect apartment-

house at 219 S. Alfred St.; 25x70 ft.; brick; tin roof; wood floors; cost \$6000; vapor heat, \$600; electric and gas lighting, \$300; Jas. A. Clarke Archt., Alexandria. Address contractor. (Lately noted.)

W. Va., Williamson.—Wells Goodykoontz let contract to erect store and apartment building. (See Stores.)

### ASSOCIATION AND FRATERNAL

Tex., San Antonio.—Scottish Rite Masons let contract to H. N. Jones Construction Co., San Antonio, to erect cathedral; 70x121 ft.; ordinary construction; metal roof; concrete and wood floors; cost \$20,000; ultimately to erect \$350,000 structure; Reuter & Harrington, Archts., San Antonio. (Lately noted.)

W. Va., Wheeling.—Directors of Scottish Rite Cathedral let contract to R. B. Kitchen Co., Wheeling, to erect cathedral to replace burned structure; let contract to Riverside Bridge Co., Wheeling, for steel construction, and to Geo. Electric Co., Wheeling, for electrical work; plans by Fred F. Faris, Wheeling, call for 5-story-and-basement building; 89x115 ft.; fireproof; tile partitions; steel girders 8 ft. by 40 in.; 8 marble pillars around rotunda; theater to seat 1000; stage 46x60 ft.; banquet hall 60x112 ft.; 2 elevators; pipe organ; marble entrance; cost about \$200,000; B. E. Hamilton. (Noted in June.)

### BANK AND OFFICE

D. C., Washington.—Potomac Electric Power Co. let contract at \$57,803 to Jas. L. Marshall, Room 217, 700 12th St. N. W., Washington, to erect office building at 14th and C Sts. N. W.; 192x96 ft.; 5 stories; fireproof. (Contractor noted in May as low bidder.)

Fla., DeLand.—Howard P. Stewart of Stewart & Sholtz purchased site on Indiana Ave. and let contract to Geo. E. Ackroyd to erect office building; 30x30 ft.; 1 story; 2 suites.

Fla., Miami.—Bank of Bay Biscayne, J. E. Lummus, Pres., let contract to Geo. W. Muller Bank Fixture Co., Atlanta, for improvements to bank building at cost of about \$12,000.

Ga., Savannah.—National Biscuit Co., New York, is reported to have let contract to erect office, store and warehouse building. (See Warehouses.)

Ky., Elkton.—Farmers and Merchants' Bank let contract to F. H. May & Co., Evansville, Ind., at \$10,000 to erect bank building on Public Square; 46x57 ft.; brick; asbestos roof; tile floor; \$800 steam heat; \$200 electric light; \$100 vault lights in concrete walk; J. T. Waller, Archt., Hopkinsville, Ky.

La., New Orleans.—Citizens' Bank & Trust Co. let contract to Lionel Favret, New Orleans, to improve building; will construct reinforced concrete and steel vault on first floor, install marble banking fixtures, steel and mahogany furnishing, white marble tile floors, remodel entrance to elevators, finish vestibules in marble, install elevators, rebuild stairways with marble and steel, tile floors on upper floors, etc.; cost about \$50,000; Nolan & Torre, Archts., New Orleans.

Md., Baltimore.—Drovers and Mechanics' Bank let contract to B. F. Bennett Building Co., 123 S. Howard St., Baltimore, to erect addition; 2 stories; fireproof; 59.7x79 ft.; cost about \$159,000; Joseph Evans Sperry, Archt., 409 Calvert Bldg., Baltimore. (Previously noted.)

Tenn., Maryville.—Cooper & Willard let contract to erect building. (See Stores.)

Va., Norfolk.—National Bank of Commerce let contract to Baker & Brinkley, Norfolk, to erect additional story to building for luncheon; cost \$10,000; Louis R. Moss, Archt., Norfolk. (Lately noted.)

### CHURCHES

Md., Cumberland.—Trinity M. E. Church, Rev. Harry V. Wheeler, pastor, let contract to Edgar E. Gerard, 232 Humboldt St., Cumberland, to erect building and improve Sunday-school room; auditorium, 45x45 ft.; seating capacity 300; brick, with tile trimmings; asbestos shingle roof; cost about \$10,000; W. A. Rayfield & Co., Archts., Box 649, Birmingham, Ala. (Noted in June.)

Miss., Meridian.—East End M. E. Church South has plans by Wm. Drago, New Orleans, and let contract to F. Hopkins, Meridian, to erect building; 120x120 ft.; ordinary construction; cement and wood floors; Barrett specification roof; low-pressure steam heat; cost \$25,000. (Lately noted.)

W. Va., Huntington.—Rev. H. B. Altmeyer let contract to H. Persun, Huntington, to

erect rectory for St. Joseph's R. C. Church; 40x47 ft.; brick, terra-cotta and limestone; slate roof; hardwood and tile floor; hot-water heat; electric and gas light; cost \$10,000; Meador & Sweeney, Archts., Huntington. (Lately noted.)

W. Va., Parkersburg.—Building Comm. has plans by and let contract to J. B. Martin, East Liverpool, O., to erect building at Emerson and Blennerhassett Ave.; 62x57 ft.; fireproof; slate roof; bowled floor; cost \$9405; lately noted; address contractor. (See Machinery Wanted—Heating Equipment, Rev. R. W. Edmondson.)

### CITY AND COUNTY

Ala., Fayette—Jail.—County Commrs. let contract to erect jail; steam heat; electric and gas lighting; cost \$15,000.

Ga., Atlanta—Library.—Carnegie Library Board let contract to G. H. Bray, 1527 Candler Bldg., Atlanta, to erect South Side Branch Library at Capitol and Georgia Aves.; 1 story, 31x67 ft.; brick and frame; tile roof; wood joist floor; cost \$15,000; \$1000 direct radiation heat, smokeless boiler; \$1200 Greenfield conduit system wiring and fixtures; G. & G. Telescopic ash holder; Henry D. Whitfield, Archt., 106 5th Ave., New York. Address Contr. (Lately noted.)

Miss., Raymond—Jail.—Hinds county let contract to A. L. Dickson, Jackson, Miss., to erect jail; 29x39 ft.; reinforced concrete; Johns-Manville 3-ply built-up roof; cement floors; cost \$9000; heating \$75; E. J. Hull, Archt., Jackson. (Lately noted.)

### DWELLINGS

Ala., Attalla.—A. L. Dupre closed contract with Charles Gentry to erect 2 cottages.

Ala., Birmingham.—F. A. Cox let contract to R. L. Daniel, Birmingham, to erect 2-story frame residence; cost \$3500.

Ala., Birmingham.—Miss Mamie Wallace let contract to E. M. Heller, Birmingham, to erect dwelling; 2 stories; frame; cost \$3000. (Lately noted.)

Ala., Birmingham.—Mrs. C. A. Birk let contract to Whitlow-Franklin Co., Birmingham, to erect dwelling; 2 stories; frame; cost \$1500.

Ala., Birmingham.—Clarence Going let contract to M. D. Holmes, Augusta, to erect 1-story bungalow; E. H. Knight, Archt., Brown-Marx Bldg., Birmingham.

Ala., Birmingham.—R. L. Bruner let contract to W. E. Walthall, Birmingham, to erect 2-story brick-vener residence; cost \$7000.

D. C., Washington.—Herman Hiltz let contract to Paul V. Mitchell & Co., 1413 G St. N. W., Washington, to erect dwelling at 18 Longfellow St.; 2 stories; frame; cost \$3500; J. Hensley Hoffman, Archt., 1413 G St. N. W., Washington.

Fla., Jacksonville.—P. C. Stickney let contract to J. B. Cox to erect dwelling; 2 stories; stucco on metal lath; asphalt shingle roof; hot-water heat; hardwood floors; tiled bathrooms; tiled porch; cost \$10,000; Mellen C. Greeley, Archt., The Baldwin, Jacksonville.

Fla., New Smyrna.—J. C. Courtney let contract to W. B. Eckler, New Smyrna, to erect 8-room dwelling; construction begun.

Fla., Orlando.—Jay Campbell let contract to J. L. Long to erect 7-room residence.

Fla., Tampa.—R. G. Albury let contract to M. F. Lopez, P. O. Box 85, Ybor Sta., Tampa, to erect dwelling on Boulevard Ave.; 31x56 ft.; frame; rock-surfaced shingle roof; oak floors; J. Fred James, Archt., Tampa. Address contractor.

Ga., Albany.—J. C. Fulford let contract to W. S. Weston, Albany, to erect dwelling; 7 rooms; bungalow type; cypress shingle roof; pine floors; city electric lighting; cost \$4000; Murphy & Reid, Archts., Albany. (Lately noted.)

Ga., Atlanta.—Mrs. H. E. Phipps let contract to Fulton County Home Builders, Atlanta, to erect dwelling; 2 stories; frame; cost \$3800.

Ga., Atlanta.—J. T. Wilkie let contract to B. J. Fuller, Atlanta, to erect 8-room dwelling on Rosedale Rd. near Greenwood Ave.; 2 stories; frame; cost \$5500.

Ga., Atlanta.—Geo. P. Elliott let contract to E. W. Hancock, Augusta, to erect residence; frame; cypress shingles; hardwood floors; tiled porches and terraces; beaver-board walls; cost \$6500; contract for steam-heating plant let to E. J. Erbeling & Co., Atlanta; T. M. Campbell, Archt., Chronicle Bldg., Augusta.

Ga., Augusta.—H. H. Ellison let contract to F. P. Branch, 334 Walker St., Augusta,

to erect residence; 2 stories; 7 rooms; frame; shingle roof; oak and pine floors; tiled bathrooms; \$200 hot-air heat; \$150 electric light; brick porches and terraces; cost \$5200; H. T. E. Wendell, Archt., Leonard Bldg., Augusta.

Ga., Augusta.—A. B. Proutant let contract to W. W. Jones to erect frame bungalow; granite shingles; cost \$3000; T. M. Campbell, Archt., Chronicle Bldg., Augusta. (Lately noted.)

Ga., Augusta.—H. C. Valden let contract to F. P. Branch, Augusta, to erect residence; 2 stories; 7 rooms; frame; shingle roof; hardwood floors; \$200 hot-air heat; \$150 electric light; tiled bathrooms; brick porches and terraces; cost \$5200; H. T. E. Wendell, Archt., Leonard Bldg., Augusta.

Ga., Macon.—J. M. Chambers let contract to F. M. Marshall, Macon, to erect residence; 1st story, brick veneer; second story, cypress shingles; rift-pine floors; cost \$4100; Nisbet & Brown, Archts., Grand Bldg., Macon.

Ga., Savannah.—R. W. Farr let contract to Standard Investments Co., Savannah, to erect bungalow; frame; metal shingles; rift-pine floors; cost \$3000; I. P. Crutchfield, Archt., Savannah.

Md., Anne Arundel County.—Dr. M. H. Carter let contract to Consolidated Construction Co., 213 Calvert Bldg., Baltimore, to erect dwelling on Severn River; 2½ stories, 32x61 ft.; hollow-tile construction; stucco exterior; quartered oak interior decoration; tile roof; hardwood floor; vapor heat; electric light; cost about \$17,000; Emory & Nussner, Archts., Professional Bldg., Baltimore. (Lately noted.)

Md., Baltimore.—A. W. Stehman has plans by and let contract to J. S. Downing, Rose Hill Terrace, Baltimore, to erect three 3-story dwellings; 16.11x65 ft.; cost \$13,275.

Md., Baltimore.—Garrison Realty Co. let contract to L. Schoenlein & Son, 2217 E. Baltimore St., Baltimore, to erect 3 dwellings at 3206-10 Carlisle Ave. and 3 on Vickers Rd., near Carlisle Ave.; 2½ stories; 24x34 ft.; frame; slate roof; steam heat; cost \$16,800; N. Preston Crooks, Archt., Baltimore.

Md., Baltimore.—John K. Culver, 1081 Munsey Bldg., let contract to Aug. C. Heim, 3768 Kossuth St., Baltimore, to erect 2 dwellings at 3773-75 Culver St.; 2 stories; frame; 28x45 ft.; cost about \$4000.

Md., Baltimore.—Dr. Don P. Peters let contract to Gladfelter & Chambers, 729 Roland Ave., Baltimore, to remodel dwelling at Melrose and Bellona Aves.; cost estimated at about \$10,000. (Lately noted.)

Md., Baltimore.—Dr. Richard H. Follis let contract to Willard E. Harn Co., 213 N. Calvert St., Baltimore, to remodel dwelling at 3 E. Read St.

Md., Baltimore.—Northwest Realty Co. let contract to Geo. R. Morris, 45 Gunther Bldg., Baltimore, to erect dwelling at 2801 Allendale Ave.; 1½ stories, 31x41.6 ft.; frame; slate roof; steam heat; cost \$3000; plans by Contr.

Miss., Yazoo City.—J. F. Barbour let contract to Central Mississippi Construction Co., T. W. Jones, Mgr., Jackson, Miss., to erect residence; exterior walls of pressed brick and hollow tile; 11 rooms with solarium and conservatory; Spanish tile roof; white oak floors in main rooms on first story; low-pressure gravity return steam heat; conduit system of lighting; cost with equipment \$10,362; Emmett J. Hull, Archt., 222 Daniel Bldg., Jackson, Miss.

Mo., Kansas City.—Brooks Building & Investment Co., 413 Reliance Bldg., let contract to C. W. Smith, 35 W. 58th Streetway, Kansas City, to erect dwellings at 23, 29, 35, 39, 43 and 47 W. 58th Streetway; mill construction; shingle roof; white-oak floors; cost \$4500 each; hot-water heat \$500; electric wiring \$45. (Lately noted.)

Mo., Kansas City.—A. Lentzner let contract to J. H. Williamson, St. Louis, to erect 2-story dwelling at 6164 McPherson St.; cost \$5000.

Mo., St. Louis.—Charles Hogg let contract to Hogg & Reid, St. Louis, to erect 2-story dwelling at 1129 S. King's Highway; cost \$3900.

Mo., St. Louis.—Wm. Triska let contract to F. Susek, St. Louis, to erect 2-story dwelling at 3300 Juniata St.; cost \$4100.

N. C., Raleigh.—Misses Stunkels let contract to W. H. Norton, Raleigh, to erect residence; bungalow type; frame; hot-air heat; slate roof; cost \$3000; J. M. Kennedy, Archt., Raleigh; construction begun.

N. C., Winston-Salem.—Mrs. R. J. Reynolds let following subcontracts for erection of proposed dwelling: Hollow-tile work, A. S. Reid & Co., Morris Bldg., Philadelphia,

Pa.; exterior mill work, A. Wilt & Sons, 724 N. Front St., Philadelphia; cut stone work (granite), Lemmerman & Hoffman, Mt. Airy, N. C.; cut stone work (limestone), John Diebold Sons Co., Louisville, Ky.; structural and other iron work, Gehret Bros., Bridgeport, Pa.; plans by Charles Barian Keen, Bailey Bldg., Philadelphia, call for 1-story structure, 60x100 ft., with 2 wings 25x50 ft.; C. N. Langley, Winston-Salem, N. C., contractor in charge. (Previously noted.)

S. C., Anderson.—H. R. Fitzgerald, Mgr. of Anderson Fertilizer Co., is reported to have let contract to John Linley and Gene Watson, Anderson, to erect \$3000 bungalow in North Anderson; 6 rooms; C. R. MacDonald, Archt., Anderson.

Tenn., Memphis.—Clifton F. Jameson let contract to A. Merriman, Memphis, to erect dwelling on Forrest Ave.; 2 stories; brick; cost about \$6500; also erect garage. (Lately noted.)

Tenn., Memphis.—L. H. Strickland let contract to H. H. Higbee, Memphis, to erect three 1-story 4-room frame cottages at 2047-49-51 Carr Ave.; cost \$3000.

Tex., El Paso.—Tom Lea let contract to Jolly & Morris, El Paso, to erect residence at Newman & Nevada Sts.; cost \$8000.

Tex., Kenedy.—J. M. Nickols let contract to Neuman Bros., Kenedy, to erect lately-noted residence; 49x58 ft.; ordinary mill construction; metal shingle roof; cost \$10,000; Chas. F. Neuman, Archt., Kenedy. (See Machinery Wanted—Metal Shingles, Metal Ceiling, Metal Laths, Composition Caps.)

Tex., Rockdale.—W. H. Fletcher, Minerva, Tex., let contract to J. N. Harris, Rockdale, to erect lately-noted dwelling; 7 rooms; ordinary construction; shingle roof; wood floors; concrete sidewalks; cost without equipment \$2500. (See Machinery Wanted—Lighting Equipment.)

Tex., Gonzalez.—Zilmon Boothe let contract to rebuild burned dwelling.

Tex., Yoakum.—H. V. Remingschneider let contract to erect residence.

Va., Portsmouth.—L. C. Doughty let contract to J. W. Hoffer to erect 2-story dwelling on B St., Park View; cost \$3000.

W. Va., Follonsbee.—B. F. Murphy, Stebensville, O., is reported to have let contract to Thomas & Lott to erect eight 2-story frame residences; cost \$20,000.

### GOVERNMENT AND STATE

D. C., Washington.—Office Building.—Treasury Dept., Jas. A. Wetmore, Acting Supervising Archt., Washington, let general contract to John H. Parker Co., 315 4th Ave., New York, at \$1,622,487 to erect office building for Dept. of Interior; contract for mechanical work to Wm. Gordon Corp., New York, at \$237,213; for elevators to Otis Elevator Co., Washington office, 614 13th St. N. W.; main office, New York, at \$49,569; plans call for building about 680,000 sq. ft.; site about 400x400 ft.; 7 stories and basement; face brick and limestone facing; steel frame; tile roof; concrete floors; steam heat; electric light; 11 electric elevators; cost about \$2,500,000. (Noted in July as lowest bidders.)

Va., Radio-Offices.—Bureau of Yards and Docks, Navy Dept., Washington, D. C., let contract at \$16,966 to W. E. Mooney, Evans Bldg., Washington, to erect office building; 2 stories; 50x36 ft.; fireproof; slag roof; hollow-tile floor; \$950 hot-water heat; \$500 electric light. (Previously noted.)

### HOSPITALS, SANITARIUMS, ETC.

Okla., Alfine.—Dr. H. A. Lile has plans by and let contract to E. G. Smith, Pawnee Rock, Okla. (present address Alfine) to erect hospital building lately noted at Cherokee, Okla.; 2 stories; 40x70 ft.; nearly fireproof; wood floors; electric lighting; roofing not decided; cost \$7000; hot-water heat \$900; brick work not yet let; address contractor at Alfine. (See Machinery Wanted—Motor; Heating Plant; Plumbing.)

Okla., Enid.—State Board of Public Affairs, J. M. Aydelotte, Chrmn., Oklahoma City, let contract to Miller & Schafer to erect building for Institute of Feeble-Minded; steel and concrete construction; cost \$50,000; Layton & Smith, Archts., Oklahoma City. (Lately noted.)

Okla., Vinita.—State Board of Public Affairs, J. M. Aydelotte, Chrmn., Oklahoma City, let contract to Kreipe-Schafer Construction Co., El Reno, Okla., to erect East Oklahoma Hospital; fireproof; reinforced concrete and steel; cost \$50,000. (Lately noted.)

S. C., Anderson.—Dr. C. S. Breedin has plans by Casey & Fant, Anderson, for St.



Mary's Hospital at North Ave. and Holly St.; wood; 1-story and basement; steam heat; 10-ft. corridor; 2 large terraces and court finished in cement; construction to permit erection of additional story; tile floor in operating-room; cost \$7000; let contract to Mr. Anderson.

Tex., Dallas.—St. Paul Sanitarium let contract on commission basis to H. J. Curtis, Room 206, 1514 Main St., Dallas, to erect addition on Bryan, Hall and Pavilion Sts. for sanitarium; 90x175 ft.; brick and concrete; slate roof; reinforced concrete floor; cost \$180,000; \$5000 vacuum steam heat, present boilers; \$6000 electric light; \$5500 electric elevators; J. Ed. Overbeck, Archt., 708 Wilson Bldg., Dallas. Address Archt. (Lately noted.)

W. Va., Weston.—J. S. Lakin, Pres. State Board of Control, Charleston, W. Va., let contract at \$66,870 to Dawson Construction Co., Pittsburgh, Pa., to furnish materials and erect building for convalescent dining hall, kitchen, storeroom and cold-storage at Weston State Hospital according to plans by H. R. Warner, Charleston, W. Va.; 306 ft. 6 in. by 63 ft. 2 in.; 2 stories; brick walls; pressed-brick exterior; salt-glazed brick interior; fireproof floors and ceilings; tile and composition floors; metal partitions and Keen cement plaster; slate roof on wood construction; 3 fireproof covered passageways to main building. (Lately noted.)

### MISCELLANEOUS

Ga., Macon.—Fair.—Georgia State Fair Assn. let contract at \$282 to C. F. Pierce, Macon, to erect grandstand at State Fair grounds; 42x50 ft.; 60 boxes; completion by Oct. 1. (Lately noted.)

Md., Cumberland.—Stable.—Cumberland Brewing Co., N. Center St., let contract to John L. McLaughlin, Maryland Ave., Cumberland, to erect horse stable; 51x236.8 ft.; brick and concrete; Vulcanite roofing; cement floors; electric lighting; cost \$3000; Wright Butler, Archt., Cumberland.

### RAILWAY STATIONS, SHEDS, ETC.

Ga., Athens.—Georgia R. R., O. T. Nelson, Supt. of M. W., Atlanta, let contract to Hinton & Stewart, Athens, to erect 2-story brick and steel warehouse; 72x130 ft.; cost \$20,000; also let contract to same firm for grading work in connection with new freight terminals. (Lately noted.)

### SCHOOLS

Ark., Judsonia.—Prospect Bluff Special Dist. has plans by and let contract to J. S. Kelley, Judsonia, to erect school building; 80x76 ft.; slow-burning construction; J. M. Transite asbestos shingle roof; pine floor over subfloor and deader; Waterbury heating system; cost \$20,000. Address contractor. (Lately noted.)

Ark., Little Rock.—School Board let contract to M. B. Sanders, Little Rock, at \$7468 for plumbing and gasfitting in U. M. Rose School building, for which Stewart-McGehee Construction Co., Little Rock, has general contract at \$44,050; let contract for electric wiring to J. C. Dice Electric Co., Little Rock, at \$4822; John P. Almond, Archt., Southern Trust Bldg., Little Rock; also let contract to Pfeiffer-Himstedt Plumbing Co., Little Rock, for heating, plumbing and ventilating in Mitchell School, for which J. D. Johnson, 420 Johnson Bldg., Little Rock, has general contract at \$21,474; Thos. Harding, Archt., Little Rock. (Noted in July.)

Fla., Tampa.—Hillsborough county let contract to M. F. Lopez, P. O. Box 85, Ybor Sta., Tampa, to erect Moody Heights School building; 60x100 ft.; fireproof; gravel roof and asphalt; cement, tile and pine floors; cost \$15,000; heating plant \$1100. Address contractor. (Lately noted.)

Ga., Atlanta.—Thos. J. and Arthur Day have plans by Walker & Chase, Candler Bldg., Atlanta, and let contract to Wells Bros. Co., New York, for concrete frame building on S. Prior St. to be leased by city for commercial high school; main building 114x63 ft.; auditorium 60x75 ft.; fireproof; tar and gravel roof; roof garden; reinforced concrete floor; \$5000 steam heat; \$1500 electric light; concrete sidewalk; elevators; cost \$50,000; construction by owners with day labor; subcontracts to be let for grading, wiring, heating, plumbing, brickwork, roofing, millwork. (Lately noted.)

Ga., Augusta.—Academy of Richmond County, Maj. Geo. P. Butler, principal and commandant, is remodeling old City Hospital building for dormitory; plumbing, heating and lighting contracts let; furniture, crockery, tableware, mattresses, springs and other dormitory equipment will be con-

sidered in few days; J. Lister Skinner in charge; construction begun; expect to raise \$20,000 next winter to erect alumni auditorium. (Lately noted.)

Ga., East Lake, P. O. at Atlanta.—Trustees have plans by T. B. Fay, East Lake, for school, and will probably let contract to Kalb & McCauley, Atlanta (lowest bidders); 1 story; 4 rooms; voted \$8000 bonds. (Lately noted.)

Md., Brandywine.—Building Comm., W. W. Early, Secy., let contract to Burgess & Parsons, 709 10th St. N. W., Washington, D. C., to erect school building; brick or concrete; cost about \$5000; Hunter & Bell, Archts., Southern Bldg., Washington. (Noted in June.)

Md., Smithsburg.—County School Board, Hagerstown, Md., let contract to Wm. Kimler, Smithsburg, to erect school building; 81.2x63.8 ft.; ordinary brick construction; slate and slag roof; subfloors covered with sound-deadening felt and maple; cost \$16,350; heating about \$1900; electric lighting; A. J. Kinkhart, Archt., Hagerstown; practically all materials purchased. (Lately noted.)

Mo., St. Charles.—City let contract to erect school building in 4th Ward. Address The Mayor.

Mo., St. Joseph.—School Board let contract at \$40,302 to Hackett & Simpson, St. Joseph, to erect addition to Hosea School; 8 rooms; fireproof; 65x100 ft.; slate roof; steam blast heating and ventilating system; Eckel & Aldrich, Archts., St. Joseph. (Lately noted.)

N. C., Asheville.—J. M. Roberts, Principal of North State Fitting School, let contract to J. L. Bledsoe & Co. to erect school building; 36x36 ft.; 2 stories and 2 basement rooms; brick foundation; frame construction; metal shingle roof; rift pine over subfloor; cost \$4000; steam heat \$500 to \$600; city lighting; Smith & Carrier, Archts., Asheville. (Lately noted.)

Okla., Oilton.—Oilton School Dist. No. 20 let contract to J. J. Rooney & Co., Muskogee, Okla., to erect school; 2 stories; brick; accommodations for 800; fireproof; cost \$22,500.

Okla., Glen Pool.—Board of Education let contract to Latimer Construction Co., Tulsa, Okla., to erect addition to school building; 64x102 ft.; brick and frame; tile roof; wood and concrete floors; cost \$35,000; one pipe gravity heating system \$3800; lighting plant \$5000; A. Endacott, Archt., 8 Kirkpatrick Bldg., Tulsa. (See Machinery Wanted—Roofing; Hand Rail; Door Bolts; Metal Ceilings; Lighting Plant.)

Okla., Muskogee.—State Board of Public Affairs, J. M. Aydelotte, Chrmn., Oklahoma City, let contract to L. F. Lee, Oklahoma City, to erect dormitory for School for Blind; cost \$25,000; Layton & Smith, Archts., Oklahoma City. (Previously noted.)

Okla., Okmulgee.—Board of Education let contract to Caddo Construction Co., Okmulgee, to erect high school; 3 stories; 70x178 ft.; cost \$73,000; Smith, Ren & Lovitt, architects, Finance Bldg., Kansas City. (Previously noted.)

Tenn., Knoxville.—City has plans by Albert Baumann, Knoxville, for John Bell Brownlow School at Glenwood and Luttrell Sts., and let contract at \$16,561 to McMurray & Larue, Knoxville; 2 stories; 55x106 ft.; ordinary construction; gravel roof; wood floor; steam heat; electric light; cost \$30,000; also let contract at \$2395 to Knoxville Plumbing & Heating Co., Knoxville, for plumbing and heating. (Lately noted.)

Tenn., Knoxville.—Park City School Board, W. A. Drake, Chrmn. Comm., let contract to Claiborne & Brooks, Knoxville, at \$11,580 to erect annex to high school; exclusive of plumbing; J. H. Ryne, Archt., Vandeventer Bldg., Knoxville. (Lately noted.)

Tex., Ballinger.—School Board let contract at \$6500 to Claypool & Price, Ballinger, to remodel Central Ward School building; will also install steam heat to cost about \$1500; Sparger & Peters, Archts., Bonham, Tex. (Lately noted.)

Tex., Dallas.—B. Grunewald & Co., Omaha, Neb., have contract at \$34,400 to install heating plant in South Dallas High School, for which E. C. Gerhard Building Co., St. Louis, has general contracts; Wm. B. Ittner, Archt., St. Louis. (Details and other contracts lately noted.)

Tex., Dallas.—Rev. Nathan Powell, 3920 Wycliffe Ave., let contract to H. Kramer, 807 Sumter Bldg., Dallas, to erect training school in University Heights Addition; 40x100 ft.; 2 stories and basement; semi-fireproof; tar and gravel roof; basement floor cement; other floors wood; cost about \$12,000; Woerner & Cole, Archts., 513 Sumpter Bldg., Dallas; heating plant furnished by Kinsison Bros.,

Dallas; construction begun. Address contractor. (Lately noted.)

Tex., Fort Worth.—A. W. Flynt, 334 Monroe St., Fort Worth, general contractor to erect Masonic Orphans' Home School, let following subcontracts: Excavating, R. C. Montgomery; mill work, Ingram Mill Work Co.; painting, Will S. Akin; electric wiring, Eugene Ashe Electric Co.; iron and steel work, Southwestern Mechanical Co.; marble and tile, C. A. Steele & Co.; cut stone, J. B. Huffman; plastering, C. M. Hickman; sheet metal, E. O. Woods; roofing, Lydick Roofing Co., all of Fort Worth; plans by Hubbell & Greene, Dallas, call for structure 150x142 ft.; cost \$55,000. (Previously noted.)

Tex., Gainesville.—Board of Control, Patrick Henry, Chrmn., let contract to Tom Barrentine, Gainesville, to erect superintendent's residence, dairy and barn at Texas State Girls' Training School; cost \$5600. (Noted in June.)

Tex., Humble.—School Board let contract to W. L. Goynes, Houston, to erect annex to school; 2 stories; brick; cost \$6200; F. S. Glover & Son, Archts., Houston. (Lately noted.)

Tex., Orange.—City let contract to Chandler & Cottle, Orange, to erect high school. (Lately noted to have voted bonds for schools, etc.)

Va., Richmond.—School Board let contract at \$17,649.70 to Davis Bros. Co., Richmond, to erect Moore School, and at \$4950 to American Heating & Ventilating Co., Richmond, for heating and ventilating; also let contract at \$28,950 to P. J. White & Son, Richmond, to erect Fairmount School; at \$5001 to American Heating & Ventilating Co., Richmond, for heating; C. M. Robinson, Inc., Archt., Richmond. (Lately noted.)

### STORES

Ala., Birmingham.—C. J. and J. R. Smith let contract to C. M. Allen & Son, Birmingham, to alter brick building; cost \$5000.

Fla., St. Augustine.—J. Herman Lynn let contract to Jos. Guiseman, St. Augustine, to erect store building on St. George St.; 83x71 ft.; brick and oriental stucco; Barrett specification slag roof; electric and gas light; cost \$7000; Gould T. Butler, Archt., St. Augustine. Address Contr. (Lately noted.)

Ga., Atlanta.—James T. Anderson let contract to Griffin Construction Co., Atlanta, to erect store building at 142 Whitehall St.; 27x101 ft.; concrete frame; steam heat; cost \$18,000; construction begun.

Ga., Augusta.—Von Canp, Vaughan & Gerald let contract to T. O. Brown & Son, Augusta, to erect addition to store building.

Ga., Gainesville.—J. E. Jay will erect business building; Jos. Bowden in charge of woodwork; J. F. Jay to superintend woodwork.

Ga., Savannah.—National Biscuit Co., New York, is reported to have let contract to erect store, office and warehouse building. (See Warehouses.)

Miss., Laurel.—Abraham Dannis, Overt, Miss., let contract to W. M. Morris, P. O. Box 557, Laurel, to erect store building; 24.10x63.10 ft.; mill construction; metal roof; wood floors; cost \$6000; no heating; lighting \$150; sidewalks; A. N. Barfield, Archt., Laurel; construction begun. Address Contr. (Lately noted.)

Mo., Kansas City.—E. W. Shields, Board of Trade Bldg., let contract to Swenson Construction Co., 625 Finance Bldg., Kansas City, to erect building at 21st and Grand Ave.; 50x115 ft.; 6 stories; brick and concrete; cost \$100,000; Wilder & Wight, ar-

chitects, 401 First National Bank Bldg., Kansas City.

N. C., Durham.—Gilbert C. White let contract to J. G. Lawrence, Durham, to erect building for drug store and bakery; 25x96 ft.; brick; stone trim; slag roof; tile and granolithic floors; cost \$5000; Hill C. Luthicum, Archt., Durham. (Lately noted.)

Tenn., Maryville.—Cooper & Willard let contract to Walkus & Pearson, Maryville, to erect business and office building at Main and College Sts.; 43x50 ft.; 2 stories; ordinary construction; gravel roof; maple floors; steam heat; electric light; cost \$5000; Albery B. Baumann, Archt., 713 Henderson Bldg., Knoxville, Tenn. (Noted in July as Archt. preparing plans for building.)

Tex., El Paso.—L. E. Booker will erect 2 brick buildings at Anthony and San Antonio and Anthony and Durango Sts.; cost \$20,000; 3 stories; red pressed brick; C. M. Youngberg, Contr., El Paso.

W. Va., Williamson.—Wells Goodykoontz has plans by W. B. Ellsmick and let contract to Acme Construction Co. to erect 2-story brick and concrete store and apartment-house; cost \$9000.

### THEATERS

Md., Baltimore.—Lord Calvert Theater Co. let contract to Joseph Schamberger, 2123 E. Baltimore St., Baltimore, to erect theater at Fulton Ave. and Baker St.; ornamental brick; 36½x142½ ft.; fireproof; cement floor; cost about \$12,000; Francis E. Torney, Archt., 813 Newington Ave., Baltimore. (Lately noted.)

### WAREHOUSES

Ga., Columbus.—Morton Realty Co. let contract to L. E. Wooten, Columbus, to erect warehouse; 74x145 ft.; brick; sprinkler system; will be leased to Meritas Mills.

Ga., Savannah.—Marcus & Co. let contract to W. A. Chaffee, Savannah, to erect warehouse in rear 408 W. Broad St.; 23x80 ft.; ordinary construction; metal roof; concrete floor; electric light.

Ga., Savannah.—National Biscuit Co., 15th St., Ninth and Tenth Aves., New York, is reported to have let contract to Olaf Otto, Savannah, to erect office, store and warehouse building on E. Broad St.; store and office portion 3 stories; warehouse in rear; brick and terra-cotta facing; spur track to warehouse; cost \$40,000.

La., New Orleans.—Board of Port Commrs. let contract to H. M. Moody to install steam and other piping in cotton compress in connection with warehouse improvements. (Jacob A. Zimmerman & Son, New York, lately noted as lowest bidders to erect Warehouse "E".)

Tenn., Manchester.—Jas. H. Ashley let contract for brick work on tobacco warehouse lately noted; 36x80 ft., with 36x40-ft. basement; brick; rubber roof; probably cement floors; construction begun. (See Machinery Wanted—Roofing; Screws.)

Tex., Crockett.—Houston County Warehouse Co. let contract to erect cotton sheds; 60x204 ft.; ordinary construction; composition roof; earth and cement floors; cost \$5000; Chas. Lancaster, Archt.; material purchased.

Tex., Houston.—City, Ben Campbell, Mayor, let contract to Horton & Horton, Houston, to erect cotton sheds, construct wharf, tracks, etc.; lately noted; cost \$139,000. (See Miscellaneous Construction.)

Va., Fredericksburg.—E. M. Young & Co. let contract to F. P. Stearns to erect warehouse; 40x100 ft.; wood and steel construction.

## RAILROAD CONSTRUCTION

### RAILWAYS

Ala., Falco.—Connection of 2 mi. from Leonard Junction via Falco to Horseshoe is being built between the Florida, Alabama & Gulf R. R. and the lumber road of the Horseshoe Lumber Co., forces of the latter doing the work. The former road has obtained trackage rights over the latter. Thos. A. Johnson, Pensacola, Fla., is receiver.

Ark., Washington.—Right of way is being cleared from Washington to Columbus, Ark., about 7 mi., for the proposed interurban railway. Rufus S. Stout of Pine Bluff, Ark., is reported interested.

Ark., Cotton Plant.—Cotton Plant & Southwestern Ry. has about one-half of its 18 mi. graded. Chicago Mill & Lumber Co. is back of the line.

Ga., Macon.—Macon Terminal Co. is authorized by the State Railroad Com. to

issue and sell immediately \$1,000,000 of bonds and \$100,000 of stock to build the proposed new terminal station. W. A. Winburn, Pres., and C. K. Lawrence, Ch. Engr. Central of Georgia Ry., Savannah, Ga., in charge.

Ky., Ashland.—Ohio Valley Electric Ry. Co. proposes to build an extension from Ashland to Russell, several miles. W. W. Magoon, Huntington, W. Va., is Gen. Mgr.

Md., Hagerstown.—Baltimore & Ohio R. R., it is reported, will build a branch 4 mi. long from Hagerstown to the plant of the Security Lime & Cement Co., F. L. Stuart, Baltimore, Md., is Chief Engr.

Mo., Siloam Springs.—Chas. Shacklett of Siloam Springs is also said to be interested in the proposed railroad from Siloam Springs to Pomona and other points in which B. J. Boyce of West Plains, Mo., and N. O. Tate of Norton, Kan., are concerned.

N. C., Boone.—Virginia-Carolina Ry. is considering possibility of building an extension of 16 mi. from Todd to Boone. Geo. P. Johnson, Abingdon, Va., is Pres. and Gen. Mgr.

N. C., Concord.—Southern Ry. is expected to let contract soon for 5 mi. of second track from Concord to Arwings. W. H. Wells, Washington, D. C., is Ch. Engr. of Constr.

N. C., Pineola.—Linville River Railway Co. has filed amendment to its charter providing for possible building of lines in Avery, Mitchell, Watauga and McDowell counties for a distance of 60 mi. from the main line. E. P. Earle, Johnson City, Tenn., is Pres.

N. C., Andrews.—The Wright-Johnstone Contracting Co. is reported to have completed about 95 per cent. of the grading on the Hiwassee Valley Railroad from Andrews via Peachtree to Hayesville, N. C., 25 mi. E. Cloud is Chief Engr.

Okl., Drumright.—J. A. Frates, Gen. Supt. St. Louis & San Francisco R. R., Springfield, Mo., is reported investigating with the idea of building an extension of 20 mi. to Drumright. F. G. Jonah, St. Louis, is Ch. Engr.

Okl., Henryetta.—Z. T. Sweeney of Columbus, Ind., is reported interested in a plan to build an electric railway from Henryetta to Denver, Okla., 3 mi.

Okl., Lakemp.—Lakemp & Northwestern Ry. Co., capital \$100,000, is chartered; incorporators, I. N. Edwards, George C. Warlick, J. W. Steffen, W. B. Lehman and E. W. Lehman, all of Lakemp. Route of line from Gage northwest to Ivanhoe, about 25 mi.

Okl., Miami.—Central States Construction Co. of Oklahoma City, capital \$100,000, is chartered to build the proposed Oklahoma & Interstate Ry.; incorporators, John R. Rose, J. R. Eldridge, G. C. Jones and A. G. Ritz, all of Oklahoma City. Line is to connect Tulsa, Miami, Collinsville, Joplin and other points.

S. C., Charleston.—Construction of the proposed Charleston Southern R. R. from Charleston to Savannah, about 55 mi., is expected to begin by Sept. 1 or soon thereafter. W. R. Bonsal of Hamlet, N. C., and others are interested.

S. C., Conway.—Eddy Lake & Northern R. R. Co. has filed amendment to charter extending time to complete line for 10 years. Proposed route from Eddy Lake northward to either Marion or Mullins, S. C., about 40 mi. George Officer is Secy., other directors being W. M. Burgan and Norman James. R. B. Scarborough of Conway is Atty.

S. C., Newberry.—J. F. Livingston of Columbia, Pres. of the Columbia, Newberry & Laurens Railroad, according to a report from Edgefield, S. C., is preparing to build a railroad from Newberry southward via Saluda and Edgefield to Augusta, Ga., about 65 mi.

S. C., Spartanburg.—Track work of the Southern Ry. in connection with improvements of the passenger station is within a distance of about 2000 ft., and includes building of several new tracks and minor changes in existing tracks.

S. C., Walterboro.—Atlantic Coast Line, it is rumored, contemplates building a cut-off line from St. Stephens to Yemassee via Ridgeville and Walterboro, about 75 mi. E. B. Pleasants, Wilmington, N. C., is Ch. Engr.

Tenn., Chattanooga.—C. E. James of Chattanooga and Slater J. Conner of Hixson are reported figuring upon the construction of an electric railway from Chattanooga to Hixson, several miles.

Tenn., Greenville.—Contractors Jacoby & Sherrod are reported to have completed 5 mi. of grade on the Carolina, Greenville & Northern R. R. between Raders and Kingsport, Tenn.

Tenn., Oneida.—J. E. Rods & Co. are to begin work immediately on an extension of the Tennessee Ry. from Charleys Branch to the State mines, 11 mi.

Tex., San Antonio.—Concerning the recent statement that the Artesian Belt R. R. might soon be extended to Crowther, a later report says that J. C. Terrell has been removed as receiver and that the property is again in the hands of the West Texas Bank & Trust Co. of San Antonio.

Tex., San Antonio.—International & Great Northern R. R. is expected to build yards on a tract of land recently purchased 5 mi. south. O. H. Crittenden, Houston, Tex., is Ch. Engr.

Va., Petersburg.—Petersburg & James River Electric Ry. Corp. has graded 3 mi. of its line between Petersburg and Hopewell, about 11 mi. J. Walter Long, Washington, D. C., is Pres.

Va., West Point.—C. L. Ruffin of Rich-

mond will make survey for the Richmond, Rappahannock & Northern Ry. from West Point to Urbanna, Va., 17 mi. Address in care of the railway company at Room 514 American National Bank Bldg., Richmond, Va. Officers: Warner Moore, Pres.; H. L. Lewis, V. P.; R. H. Bruce, Treas.; James Mullin, Jr., Secy., the other directors being Oliver J. Sands, F. H. Sprague and Thomas Gresham. Charter is granted with capital consisting of \$300,000 common and \$200,000 preferred stock.

W. Va., Huntington.—Ohio Valley Electric Ry. has let contract to the Brubaker Construction Co. for an extension of its line on 12th Ave.

W. Va., Madison.—Chesapeake & Ohio Ry. is reported obtaining right of way for an extension from Madison up Pond Fork of Coal River, 8 mi. F. I. Cabell, Richmond, Va., is Ch. Engr.

## STREET RAILWAYS

Ga., Macon.—Macon Ry. & Light Co. is authorized to lay double track on Broadway between Boundary and Giles Sts.

Md., Baltimore.—United Railways & Electric Co. will extend Columbia Ave. double-track line 2100 feet from the present terminus at Gwynn's Falls to Lansdowne. Wm. A. House is Pres.

## MACHINERY, PROPOSALS AND SUPPLIES WANTED

Manufacturers and others in need of machinery or supplies of any kind are requested to consult our advertising columns, and if they cannot find just what they wish, if they will send us particulars as to the kind of machinery or supplies needed we will make their wants known free of cost, and in this way secure the attention of manufacturers and dealers throughout the country. The Manufacturers Record has received during the week the following particulars as to machinery and supplies wanted.

### "WANTS"

**Advertising Signs, etc.**—J. J. Roberts, General Delivery, Gainesville, Ga.—Correspondence with advertising agencies and with manufacturers of advertising signs and novelties.

**Agricultural Machinery.**—Georges Ragot, Paverny, Province Seine et Oise, France.—Agencies for agricultural machinery, such as reapers, mowers, etc.

**Bags (Cotton).**—See Grist Mills, etc.

**Bagging (Cotton).**—Piedmont Ginning Co., Piedmont, Ala.—Addresses of manufacturers of cotton bagging.

**Bells (Automobile and Bicycle).**—See Hardware.—Albert Harman Co.

**Bedsteads.**—See Electrical Supplies, etc. International Import Office.

**Bed Spring and Iron Bed Manufacturers.**—J. J. Roberts, General Delivery, Gainesville, Ga.—Correspondence with bed spring and iron bed manufacturers.

**Bicycles, Wagons, etc.**—Faillace Hermans, Apartado No. 65, Barranquilla, Colombia.—To represent American manufacturers of bicycles, little wagons, wooden carryalls, military uniforms for boys, little swords and sabers, air guns and supplies, revolvers, toys, etc., for boys and girls, but not tin articles.

**Bottling Machinery.**—Lang N. Anderson, Liberty, S. C.—Addresses of manufacturers of or dealers in machinery for bottling soda water and soft drinks.

**Bridge Construction.**—Kingfisher County Comms., Kingfisher, Okla.—Opens bids Aug. 16 to construct 17 steel and concrete bridges; estimated cost \$21,500; C. R. Steel, Engr.; Wm. G. Newer, County Clerk.

**Bridge Construction.**—Bulloch and Effingham counties, Statesboro, Ga.—Bids at public outcry Sept. 6 to construct bridge at Guyton, Ga.; estimated cost \$4500; plans and specifications at Statesboro.

**Bridge Construction.**—Oconee County Comms., Walhalla, S. C.—Let contract Aug. 9 to rebuild Hunicutt bridge across Little River near Stamp Creek; W. C. Foster, Supr.

**Bridge Construction.**—Greenville County Suprs., Greenville, S. C.—Bids until Aug. 9 to construct Holtzclaw bridge over Enoree River; covered wood bridge on concrete piers, pile foundation; two 85-ft. spans; plans and specifications on file with County Suprs.; W. Henry Willmon, Supr.

**Bridge Work.**—Board of Comms. of Martin Free Bridge, Camden, Ark.—Bids until Aug. 9 for additions and reinforcements to Pivot Pier; cofferdam, 114 horizontal ft.; excavation, 670 cu. yds.; plain concrete, 282 cu. yds.; reinforced concrete, 482 cu. yds.; riprap, 2000 cu. yds.; also jacking up and shifting superstructure; plans and specifications obtainable for \$5; I. A. Baum, Engr.

**Bridges, etc.**—Permanent Road Comms., M. W. Raley, Secy., Terrell, Tex.—Bids until Aug. 26 to construct culverts and bridging, cross-tied timber bridging, concrete headwalls, etc.; plans, specifications and proposal forms on file at First National Bank Bldg., Terrell, and with Bartlett & Ranney, Engrs., San Antonio and Dallas; extra sets obtainable for \$10; Jas. A. Cooley, County Judge.

**Briquetting Machinery.**—Rev. J. B. Branch, care Thornwell Orphanage, Clinton,

S. C.—Data on disposal of sawdust and shavings and prices on briquetting machinery.

**Building Material.**—Rea & Craig, per W. W. Craig, Mississippi City, Miss.—Prices on sound-deadening felt, asbestos composition white roll curtain, sanitary slate for walls in baths and toilets, cast-iron window guards, composition pitch and felt roof with gravel, roofing to be applied; all for \$12,000 school building at Mississippi City, Miss.

**Building Material.**—Geo. Duensing, Concordia, Mo.—Cement, crushed stone, face brick, common brick, lime, lumber, hardware, low-pressure steam heat, ventilating apparatus, sewage-disposal system, sanitariums, drain tile, classroom furniture for \$12,000 school.

**Building Material.**—Henry King Co., Murfreesboro, Tenn.—Prices on building material for warehouse at Tullahoma, Tenn., 150x48 ft.; 2 stories and basement; concrete and brick.

**Cars (Flat).**—Geo. P. Johnson, Pres., Virginia-Carolina Ry. Co., Abingdon, Va.—10 first-class, second-hand, 40-ft., 60,000-lb. capacity flat cars.

**Carts (Screen Spreading).**—Roy C. Whyne Supply Co., 1401 Lincoln Bank Bldg., Louisville, Ky.—Correspondence with manufacturers of carts for spreading screens; wants machine of about 1-yd. capacity, equipped with automatic rotary device for spreading screens.

**Cartons.**—C. F. Mears, care Tidewater Truck Gardens, Eastville, Va.—Prices on cartons. (See Grist Mills, etc.)

**Chairs.**—See Desks and Chairs.

**Coal, etc.**—J. F. Paquet, former U. S. Vice Consul at Paris, care L. S. Buchard, 2 Rector St., New York.—Large tonnage coal and flour.

**Composition Caps.**—See Metal Shingles, etc.—Chas. F. Neuman.

**Cotton Goods.**—Hjalmar Minde, Post-box 184, Bergen, Norway.—"I am seeking for a cotton stuff as sample inlaid, signed V. O. 1 15-7 without any colored edge, 5 oz. 38 in. further as sample V. O. 2 15-7, 34 in. and 38 in., and sample V. O. 3 15-7, similar to French, 42 in."

**Cornices, etc.**—Abram de Sola, Box 95, Curacao, D. W. I.—Catalogues and prices with discounts (view to representation) on gilded cornices for doors and windows; also papier mache (or other paste) ornaments for parlor ceiling centers, etc.

**Cornices (Glass).**—See Store Fronts.—O'Neal's Lime Works.

**Crosscutting Machinery.**—See Wood Preserving Equipment.

**Crusher.**—See Road Machinery, etc.—Sanders-Pendleton Co.

**Culvert Construction.**—City Clerk, Portsmouth, Va.—Bids until Aug. 6 to construct concrete box culvert in Dinwiddie St. between Race Ave. and Harrison St.; plans and specifications obtainable from City Engr.; S. Cleburn Brown, Chmn. Street Committee.

**Curtain (Asbestos Composition).**—See Building Material.—Rea & Craig.

**Dam Construction.**—H. J. Cox, City Clerk, Toccoa, Ga.—Bids until Aug. 20 to construct sectional concrete-wood dam; plans and specifications by H. M. Nabstedt,

Engr.; on file with and obtainable from H. J. Cox, City Clerk.

**Desks and Chairs.**—M. de Cardenas & Co., Box 883, Havana, Cuba.—Catalogues, prices, discounts and terms from manufacturers of steel school desks and opera chairs.

**Door Bolts (Anti-Panic).**—Latimer Construction Co., Tulsa, Okla.—Prices on anti-panic door bolts for \$35,000 school building at Glen Pool, Okla.

**Drainage.**—Directors Cypress Creek Drainage Dist., McNairy County, Selmer, Tenn.—Open bids Aug. 16 to construct canal with 2 sections, continuous run; first section 11,400 ft. long, with cross-section of 18x12x6 ft.; second section 10,900 ft. long, with cross-section of 20x13x7 ft.; drain 30 acres on Cypress Creek; dredgeboat excavation in sandy loam; about one-third of land in cultivation, balance in timber, much of it light bushy undergrowth; contractor to furnish machinery; H. P. Wood, Atty. for Dist.

**Drainage.**—Drainage Comms. (Manatee county), Parish, Fla.—Open bids about Sept. 1 to construct main canal and 9 laterals; 3 to 20 ft. bottom width; 5 to 27 ft. deep; slopes 1½ to 1; 23 mi.; 886,292 yds. excavation—sand, clay and muck; drain 40,000 acres; Chas. S. Hill, Engr., Palmetto, Fla.

**Drills.**—See Road Machinery, etc.—Sanders-Pendleton Co., Chilhowie, Va.

**Electric Generators.**—Viggo Kohler, Hebronville, Tex.—Prices on electric generators. (See Engines (Oil), etc.)

**Electrical Machinery.**—See Laundry Machinery.—D. Lichtscheff.

**Electric Motors.**—See Mattress Machinery, Materials, etc.—J. Nadler.

**Electric Plant Equipment.**—Lake Region Electric Light & Power Co., C. J. Braselle, Mgr., Lakeland, Fla.—Prices on 70 H. P. oil engine, direct connected to A. C. generator, 2300 volts, 3-phase, 60-cycle, with switchboard and exciter; second-hand; transformers, meters, wire, etc.

**Electric Motors (Portable).**—Carroll Bros., 212 Pettigrew St., Henderson, N. C.—Catalogues and prices on portable electric motors, suitable for lathe, band saw, boring machine or rip saw.

**Electric Motors.**—City of Argenta, Ark. J. P. Faucette, Mayor.—Bids until Aug. 11 on two 60 H. P. slow-speed motors and equipment. (See Pumps—Sewerage.)

**Electrical Machinery.**—Charles J. Geohegan, 1428 N. 20th St., Birmingham, Ala.—100 to 150 K. W., 550-volt, D. C. generator, direct connected to engine.

**Electrical Machinery.**—A. P. Calfee, Basic City, Va.—Addresses of manufacturers of windmill motor equipment for generating electricity; for farm use.

**Electrical Supplies, etc.**—International Import Office, P. Macleff & Co., Raparapoulos St., Athens, Greece.—Catalogues, prices, samples, etc., on electrical supplies, wire, lamps, etc.; iron and steel pipes for water, gas and steam; house and kitchen stoves; iron, copper and brass bedsteads; safes; household articles; glass and porcelain ware; crystal articles. When sending catalogues, etc., advise Gerhard & Hey, international freight contractors, 21 State St., New York.

**Elevators.**—Treasury Dept., Jas. A. Wetmore, Acting Supervising Archt., Washington, D. C.—Bids until Aug. 31 for installation complete of electric passenger elevator in each of following buildings: U. S. postoffice and courthouse, Amarillo, Tex., and U. S. postoffice and courthouse at Medford, Ore. In accordance with drawings and specifications, copies of which may be obtained from office of Supervising Archt.

**Elevators.**—Treasury Dept., Jas. A. Wetmore, Acting Supervising Archt., Washington, D. C.—Bids until Aug. 31 for installation complete of elevator plant in U. S. immigration station, Baltimore, Md. In accordance with drawings and specifications, copies of which may be obtained from custodian of site at Baltimore or at office of Supervising Archt.

**Excavation and Filling.**—Florida East Coast Hotel Co., Palm Beach, Fla.—Bids on following: 5000 to 15,000 cu. yds. rock excavation, 30,000 to 80,000 cu. yds. muck and sand excavation and 160,000 cu. yds. hydraulic sand fill (suction work); for full particulars address J. R. Brooks, Engr., Palm Beach.

**Engines (Oil), etc.**—Viggo Kohler, Hebronville, Tex.—Prices on oil engines and electric generators for electric lights and water; also for irrigation.

**Felt (Sound-deadening).**—See Building Material.—Rea & Craig.

**Firearms.**—See Bicycles, Wagons, etc.



**Flour.**—See Coal, etc.—J. F. Paquet.

**Food Products, etc.**—Caribbean General Agency, St. Lucia, West Indies.—Correspondence (view to agencies on commission) with manufacturers of provisions, including butter, beans, meal, oats, onions, potatoes, pork, beef (canned or salted), illuminating oil, corn, etc.

**Furniture Manufacturers.**—J. J. Roberts, General Delivery, Gainesville, Ga.—Correspondence with furniture manufacturers in position to manufacture and market specialties.

**Glassware.**—See Electrical Supplies, etc. International Import Office.

**Grist Mills, etc.**—C. F. Mears, care Tidewater Truck Gardens, Eastville, Va.—Prices from manufacturers on grist mills, cartons and cotton bags.

**Hand Rail (Brass).**—Latimer Construction Co., Tulsa, Okla.—Prices on brass hand rail.

**Hardware.**—Albert Harman Co., 26 Hamilton Rd., Highbury, London, Eng.—In market for large quantities of cycle and motor wrenches, pillars, etc.; cycle bells and lamps, etc.; also interested with view to agencies, in hardware of suitable lines.

**Heating Equipment.**—Rev. R. W. Edmondson, Parkersburg, W. Va.—Prices on heating equipment for \$3000 church.

**Heating (Indirect Steam) Plant.**—Highy Cleaning & Dyeing Service, C. V. Highy, Prest., 2828 Main St., Kansas City, Mo.—Data and prices on indirect steam-heating plant for \$15,000 building.

**Heating Plant.**—Board of Trustees, E. H. Sholar, Prest., Chattanooga, Tenn.—Bids at office W. H. Sears, Archt., 821 James Bldg., until Aug. 10 for steam heating of Baroness Erlanger Hospital buildings; plans and specifications by W. H. Sears and K. D. Alsip, associated, and on file at their offices.

**Heating Plant.**—E. G. Smith, Alline, Okla.—Prices on heating plant for \$7000 hospital.

**Household Articles.**—See Electrical Supplies.—International Import Office.

**Inclinator, etc.**—Navy Dept., Bureau Yards and Docks, Washington, D. C.—Bids until Aug. 28 for buildings and inclinator at Naval Disciplinary Barracks, Paris Island, Port Royal, S. C.; plans and specifications on application to Bureau.

**Interior Finish (Decorations).**—See Cornices, etc.

**Knitting Equipment.**—Secy., Board of Trade, Murfreesboro, Tenn.—Data on establishment of knitting mill, prices on machinery, etc.

**Knitting Machinery.**—J. R. Adams, Jernyn, Pa.—Data and prices on machinery to manufacture hosiery.

**Lamps (Motor).**—See Hardware.—Albert Harman Co.

**Lathes, etc.**—W. I. Young, care International Traders, Ltd., 6 Church St., New York.—Addresses of (large) manufacturers of lathes and machine tools for iron and steel work; has large buying order for export.

**Laundry Machinery.**—D. Lichatschew, 6th Station, Odessa, Russia.—Catalogues and prices on laundry machinery; capacity 400 pieces; electric motor.

**Lighting Plant (Electric).**—Latimer Construction Co., Tulsa, Okla.—Prices on 110 V., D. C., 25 K. W. battery reserve lighting plant for \$35,000 school building at Glen Pool, Okla.

**Lighting Equipment.**—W. H. Fletcher, Minerva, Tex.—Prices on electric-lighting equipment for \$2500 dwelling at Rockdale, Tex.

**Locomotives.**—Shutin Iron Co., E. V. Correll, Mgr., 519 Legal Bldg., Asheville, N. C.—Prices on second-hand engines, 24-in. gauge.

**Machine Tools.**—W. I. Young, care International Traders, Ltd., 6 Church St., New York.—Correspondence with manufacturers of machine tools. (See Lathes, etc.)

**Machine Tools.**—Bureau Supplies and Accounts, Navy Dept., Washington, D. C.—Bids until Aug. 24 to furnish 2 lathes, 4-in. swing by 40 in. long; 2 lathes, 12-in. swing by 6-ft. bed; 2 hand milling bench machines; 2 vertical milling machines; 2 two-spindle drill presses; 1 short column type one-spindle press; each of schedule 8627; schedules obtainable from Bureau and Navy Pay Office.

**Manufactures.**—J. Castro Motta, successor to Motta & Irmao, Ceara, Brazil.—To represent American manufacturers of products suitable for Brazilian trade.

**Mattress Machinery, Materials, etc.**—J. Nadler, Nadler Mattress & Spring Bed

Co., Gadsden, Ala.—Prices on ticking for mattresses and materials for comforts; felt-making machines; motors of 8 or 10 H. P.; machines for stitching comforts.

**Mechanical Equipment.**—Treasury Dept., Jas. A. Wetmore, Acting Supervising Archt., Washington, D. C.—Bids until Aug. 31 for mechanical equipment (except elevators, lift and dumbwaiter) of U. S. Immigration station, Baltimore, Md., in accordance with drawings and specifications, copies of which may be obtained from custodian of site at Baltimore or at office of Supervising Archt.

**Metal Ceiling.**—See Metal Shingles, etc. Chas. F. Neuman.

**Metal Ceilings.**—Latimer Construction Co., Tulsa, Okla.—Prices on metal ceilings for \$35,000 school building at Glen Pool, Okla.

**Metal Lath.**—See Metal Shingles, etc.—Chas. F. Neuman.

**Metal Shingles, etc.**—Chas. F. Neuman, Kensdy, Tex.—Prices on metal shingles, metal ceilings, metal laths and composition caps for columns for \$10,000 residence.

**Motor (Electric).**—E. G. Smith, Alline, Okla.—Prices on electric motor.

**Mineral Dyes.**—Douglas Hotchkiss, Sentinel-Record, Hot Springs, Ark.—Data on mineral dyes; formations in which they are found, class of surroundings, etc.

**Nailsook and Steel.**—Navy Dept., Bureau Supplies and Accounts, Washington, D. C.—Bids until Aug. 17 to deliver nailsook and steel at Navy-yard, Charleston, S. C. Apply for proposals to navy pay office, Charleston, or to Bureau.

**Oil (Illuminating).**—See Food Products, etc.—Caribbean General Agency.

**Paper (Wall).**—Kuntz-Albaugh Lumber Co., 823 Lakewood Ave., San Antonio, Tex.—Carload wall paper; wants to correspond with manufacturers.

**Paper (Wall).**—Abram de Sola, Box 55, Curacao, D. W. I.—Correspondence with manufacturers of wall papers; view to representation. Send samples of paper.

**Paving.**—City of Okmulgee, Okla.—Bids late in Aug. for concrete paving; about 55 city blocks; A. F. Seider, Engr.

**Paving.**—A. M. Clarke, Town Clerk, Southern Pines, N. C.—Bids until Aug. 14 to construct about 2000 sq. yds. granolithic sidewalks; specifications obtainable from Town Clerk.

**Paving.**—Board of Aldermen, Durham, N. C.—Bids until Aug. 6 to construct about 3600 sq. yds. pavement; bids on sheet asphalt on concrete base and concrete paved between and adjacent to car tracks; plans and specifications on file with H. W. Kueffner, City Engr.; B. S. Skinner, Mayor.

**Paving.**—M. W. Purnell, City Clerk, Clarksdale, Miss.—Bids until Aug. 10 to improve streets; 9000 lin. ft. combined curb and gutter, 1000 sq. ft. driveway and 1200 sq. ft. concrete walk; W. S. Bobo, Gen. Supt.

**Paving.**—Board of Bond Trustees, W. B. Gardner, Chrmn., Fort Meade, Fla.—Bids until Aug. 17 for 30,000 sq. yds. street paving; vitrified brick, asphaltic concrete, bitulithic or other pavement, complete with curbs, gutters and drainage; plans and specifications on file with J. J. Singleton, Secy. of Trustees, and H. S. Jaudon Engineering Co., Consult. Engr., P. O. Box 582, Savannah.

**Paving.**—B. A. Wise, City Engr., Charleston, W. Va.—Bids until Aug. 9 to grade, curb and pave Lewis St. from Ruffner Ave. to end of paving, Ruffner Ave. from Jackson to Loews St., Delaware Ave. from Virginia St. to Columbia Blvd., etc.; plans and specifications on file with City Clerk and J. M. Clark, City Engr.

**Paving.**—City Council, Poplar Bluff, Mo. Bids until Aug. 16 on 6500 sq. yds. concrete pavement with Dolarway wearing surface; plans and specifications on file office of Edw. C. Thomas, City Engr. (See Sewer Construction, etc.)

**Paving.**—City of Spring Hill, Tenn., Wm. Hughes, Mayor.—Bids opened Aug. 7 on street improvements; cost \$9000 to \$12,000.

**Paving, etc.**—A. H. Williams, City Clerk, Tallahassee, Fla.—Bids until Sept. 9 to construct paving, curbing, grading and storm drainage work, in all or in part, on certain streets; specifications procurable, and plans, profiles, etc., may be seen after Aug. 6 at office of Isham Randolph & Co., Engrs., Heard Bldg., Jacksonville, Fla.; proposals opened publicly.

**Pencil Machinery.**—M. Sheremetewsky, mechanical engineer, 25 Old Basmanow St., Moscow, Russia.—Catalogues, net export prices, etc., from American manufacturers

of pencil machinery; view to representation; requests that correspondence be registered.

**Pencils.**—M. Sheremetewsky, mechanical engineer, 25 Old Basmanow St., Moscow, Russia.—Catalogues, net export prices, etc., from American manufacturers of pencils; view to representation; requests that correspondence be registered.

**Pipe.**—Whitley County Fiscal Court, E. F. White, Clerk, Williamsburg, Ky.—Bids Aug. 9 on vitrified sewer pipe, concrete pipe and corrugated iron pipe from 12 in. to 36 in., inclusive; in carload lots delivered at railroad station in the county. (See Road Construction.)

**Pipe, etc.**—Harry F. Smith, Mayor, West-ernport, Md.—Prices on 8, 6 and 4-in. cast-iron pipe, fittings, valves, street hose, hydrants, calking lead, etc.

**Piping.**—See Electrical Supplies, etc.—International Import Office.

**Piping.**—Hugh Girvan, 129 Cannon St., London, E. C., Eng.—To represent manufacturers of cast-iron drain water pipes for English and general foreign markets; sizes principally used are 2, 2½, 3 and 4-in., diameter measured inside to out; 6 ft. long, including socket, and 16, 20, 23 and 32 lbs. per link.

**Plumbing.**—E. G. Smith, Alline, Okla.—Prices on plumbing for \$7000 hospital.

**Pulverizing Machinery.**—John C. Cather, Chambersville, Va.—Data on limestone pulverizing machinery.

**Pump.**—R. D. Cole Mfg. Co., Box 575, Newnan, Ga.—Prices on triplex pumps; estimates on 2 pumps of about 200 gals. per min. or 1 of 300 gals. per min.; also on 2-stage centrifugal pump geared to motor.

**Pumps (Sewerage), etc.**—City of Argenta, Ark., J. P. Fancette, Mayor.—Bids until Aug. 11 for two 14,000-gal. sewerage pumps and two 60 H. P. slow-speed motors and equipment; plans on file City Hall.

**Pumps, etc.**—Port Com., F. W. Bruce, Chief Engr., Jacksonville, Fla.—Bids until Aug. 16 to furnish following machinery for municipal compress: Boiler and stack, boiler feed pump, pressure pump, heater and condenser combined, condenser pump and hot well; each bid to include any or all of above machinery.

**Rails.**—Sanders-Pendleton Co., Chilhowie, Va.—3 or 4 tons 30-lb. steel rails.—See Road Machinery, etc.

**Reservoir (Concrete).**—Board of Public Service, St. Louis, Mo.—Bids until Aug. 13 to reconstruct Compton Hill reservoir; concrete reinforced construction; includes raising walls and water-proofing bottoms and sides; new reservoir, capacity 35,000,000 gals.; estimated cost \$410,000; gatehouse building, \$6000; gates and operating devices, \$6000; plans by Roth & Steady, St. Louis; plans obtainable from Water Comms., Edw. E. Wall, for \$15.

**Road Construction.**—Geneva County Comms., Geneva, Ala.—Bids until Aug. 27 to grade, drain and surface with sand-clay part of Hartford and Wicksburg Rds., beginning at Hartford; expenditure \$4616.25; W. S. Keller, State Highway Engr., Montgomery.

**Road Construction.**—Marengo County Comms., A. L. Hasty, Chrmn., Linden, Ala. Bids until Aug. 9 to construct gravel and clay roads; \$120,000 appropriated; profiles and specifications on file in Probate office.

**Road Construction.**—Guadalupe County Comms., Court, Seguin, Tex.—Bids until Aug. 2 to construct 2 gravel roads in Road Dist. No. 2; specifications on file with J. B. Williams, County Judge, or may be obtained from F. E. Hess, Engr., 1604 Southwestern Life Bldg., Dallas, for \$5.

**Road Construction.**—Washington County Comms., Hagerstown, Md.—Bids until Aug. 13 to construct 2.41 mi. State-aid highway between Downsview and Spillman's Station; bids to be on blank forms, obtainable from State Roads Com., 601 Garrett Bldg., Baltimore; plans can be seen and forms of specification and contract obtained at office of State Roads Com. for \$1; Barry M. Hartle, County Clerk.

**Road Construction.**—Whitley County Fiscal Court, E. F. White, Clerk, Williamsburg, Ky.—Bids until Aug. 9 to improve road between Williamsburg and Corbin; 18 mi.; approximate quantities: 13 A. clearing and grubbing; 79,925 cu. yds. earth, 14,575 cu. yds. loose rock and 14,575 cu. yds. solid rock excavation; 125 cu. yds. water excavation; 221 cu. yds. concrete, class B; 450 cu. yds. stone box culvert; 150 cu. yds. stone paving; 200 cu. yds. stone riprap; 15,000 ft. timber, B. M., and following drain pipe: 1680 lin. ft. 12-in., 2000 ft. 15-in., 1350 ft. 18-in., 700 ft. 24-in., 125 ft. 30-in. and 200 ft. 36-in.; all work under direction and supervision of

Commr. Public Roads; H. F. Davis, County Road Engr. (Separate bid received same date for drainage pipe.—See Pipe.)

**Road Construction.**—Lawrence County Comms., Town Creek, Ala.—Bids to construct about 2 mi. macadam roads leading east from Town Creek; W. S. Keller, State Highway Engr., Montgomery.

**Road Construction.**—Clarke County Comms., Thomasville, Ala.—Bids until Aug. 31 to grade, drain and surface with sand-clay part of Thomasville and Linden Rds. and part of Thomasville and Selma Rds.; expenditure \$15,579.25; W. S. Keller, State Highway Engr., Montgomery.

**Road Machinery, etc.**—Sanders-Pendleton Co., Chilhowie, Va.—10-ton steam roller; crusher; road sprinkler; 3 or 4 tons 30-lb. steel rails; tripod steam drill.

**Road Surfacing.**—U. S. Dept. of Agriculture, Washington, D. C.—Bids by Chrmn. Board of Awards, at office of Chief Clerk, until Aug. 10 for bituminous surface treatment of Falls Rd. (experimental work) from Rockville to Potomac, Montgomery county, Md.; 5.4 mi. long, 15 ft. wide; specifications, blanks, etc., on application office of Public Roads and Rural Engineering, 515 14th St. N. W., Washington.

**Roofing.**—See Building Material.—Rea & Craig.

**Roofing (Tile).**—Latimer Construction Co., Tulsa, Okla.—Prices on roofing tile for \$35,000 school building at Glen Pool, Okla.

**Roofing (Rubber).**—Jas. H. Ashley, Manchester, Tenn.—Prices on rubber roofing for warehouse 36x80 ft.

**Safes.**—See Electrical Supplies, etc.—International Import Office.

**Saw Table.**—Carroll Electric Co., 514 12th St. N. W., Washington, D. C.—Combination rip and cross-off saw table to take up to 20-in. saws extreme.

**Sawmill (Portable).**—H. L. Williamson, care Consolidated Title Co., Fort Myers, Fla.—Data and prices on portable sawmill.

**Screws (Tobacco).**—Jas. H. Ashley, Manchester, Tenn.—Prices on tobacco screws.

**Sewer Construction.**—City of Greenville, S. C., John B. Marshall, Mayor.—Bids until Aug. 10 to construct sanitary sewer extensions; 19,000 lin. ft. 8-in. sewers, 65 manholes, 15 flush tanks, 1000 cu. yds. rock excavation, brick work, cast-iron pipe, castings, etc.; plans and specifications on file with C. P. Ballenger, City Engr.

**Sewer Construction, etc.**—City Council, Poplar Bluff, Mo.—Bids until Aug. 16 to construct sanitary sewers in Sewer Dist. No. 2; about 27,000 ft. 6 to 12-in. vitrified pipe, duplex ejector outfit, 35 manholes; also receive bids on 6500 sq. yds. concrete pavement with Dolarway wearing surface; plans and specifications on file office of City Clerk and obtainable from Edw. C. Thomas, City Engr., for \$5.

**Sewer Construction.**—City of Tulsa, Okla., E. B. Cline, City Auditor.—Bids until Aug. 9 to construct "sanitary sewer system in Sewer Dist. No. 10, including inlets, manholes, etc.; sewer to have interior diameter of 8 in.; plans, profiles and specifications on file with T. C. Hughes, City Engr.

**Slats.**—See Building Material.—Rea & Craig.

**Spreading Machinery.**—See Carts (Screen Spreading).—Roy C. Whyne Supply Co.

**Sprayer (Oil).**—James Asher, Supt. Public Works, West Palm Beach, Fla.—High-pressure oil sprayer for oiling streets; wants data and prices on sprayer which heats oil before spraying.

**Sprinkler.**—See Road Machinery, etc.—Sanders-Pendleton Co.

**Sprinkling Wagons.**—See Sprayer (Oil).—James Asher.

**Stampings, Forgings, etc.**—J. J. Roberts, General Delivery, Gainesville, Ga.—Small metal stampings, drop forgings and steel castings, made under exclusive contract.

**Staves.**—J. F. Paquet, former U. S. Vice Consul at Paris, care L. S. Burchard, 2 Hector St., New York.—Wants to buy from manufacturers direct for French interests large quantities of hardwood staves for wine casks to save French wine crop.

**Steel.**—See Nailsook and Steel.—Navy Dept.

**Steel.**—Bureau Supplies and Accounts, Navy Dept., Washington, D. C.—Bids until Aug. 3 to furnish medium steel bars, schedule 8622, and 5200 lbs. steel plates, schedule 8622; delivery at Charleston; schedules obtainable from Bureau and Navy Pay Office, Charleston.

**Steel Chairs and Desks.**—See Desks and Chairs.

**Steel Reinforcing Bars, etc.**—Panama Canal, F. C. Boggs, Gen. Purchasing Officer, Washington, D. C.—Bids until Aug. 20 to furnish steel reinforcing bars, bronze wire cloth, screws, cotter pins, cup hooks, staples, cable clips, tacks, hasps, hinges, night latches, chain blocks, snatch blocks, tackle blocks, steel cargo trucks, grindstones, stable brooms, floor brushes, buckets, oil cans, ladders, life preservers, blow torches, anchor lights, window glass, pipe-cutter wheels, awning pulleys, steel tapes, rules, lantern globes, oars, tool handles, mop handles, mop heads, packing, oakum, crayons, twine, wrapping paper, index cards and lumber: blanks and general information relating to this circular (No. 558) may be obtained from this office or offices of assistant purchasing agents, 24 State St., New York; 614 Whitney-Central Bldg., New Orleans, and Fort Mason, San Francisco; also from U. S. Engr. offices in Seattle, Los Angeles, Baltimore, Philadelphia, Pittsburgh, Boston, Buffalo, Cleveland, Cincinnati, Chicago, St. Louis, Detroit, Milwaukee, St. Paul, Chattanooga, Louisville, Mobile and Galveston; Commercial Club, Kansas City, Mo.; Chamber of Commerce, Quincy, Ill., and Commercial Club, Tacoma, Wash.

**Stoves.**—See Electrical Supplies, etc.—International Import Office.

**Store Fronts.**—O'Neal's Lime Works, C. L. O'Neal, Propr., Eureka, Ala.—Wants to correspond with manufacturers of store fronts, glass cornices, etc.

**Stump-Pulling Machinery.**—H. L. Williamson, care Consolidated Title Co., Fort Myers, Fla.—Data and prices on stump-pulling devices.

**Toys.**—See Bicycles, Wagons, etc.

**Tubes (Collapsible Metal).**—Geo. L. Colgate, Greeley, Colo.—Addresses of manufacturers of soft metal tubes, such as used for artists' colors, tooth-paste, etc.

**Wagons.**—See Bicycles, Wagons, etc.

**Water-works.**—Shaft Water Co., Shaft, Md.—Bids until Aug. 19 to construct water line from dam at Middlethian to Shaft, 10,000 ft.; trench to be 2 ft. deep for 2 in. galvanized pipe; specifications on file at Wm. Davis, store.

**Water-works Supplies.**—See Pipe, etc. Harry F. Smith, Mayor, Westernport, Md.

**Water-works.**—Board of Trustees, Scott Powell, Prest., Caddo, Okla.—Bids until Aug. 10 for complete construction pump station and filter about as follows: Brick pump station, 2 oil engines, 2 triplex pumps, 2 centrifugal pumps, settling basins, slow sand filter, pure water reservoir, 600 ft. 6-in. cast-iron pipe and 1000 ft. 8-in. cast-iron pipe to take up and relay; hydrants, valves, etc.; alternate bids on Pittsburgh rapid sand filter; plans and specifications obtainable from J. E. Davis, City Engr. (Bids lately noted for July 27 were rejected.)

**Well-drilling Machinery.**—H. L. Williamson, care Consolidated Title Co., Fort Myers, Fla.—Data and prices on artesian well-drilling machinery.

**Window Guards (Cast Iron).**—See Building Material.—Rea & Craig.

**Window Sash (Metal), etc.**—Secy., Dept. of Interior, Washington, D. C.—Bids until Aug. 18 to replace wood frame windows in monitors and gables of Pension Office Bldg., with metal sash and frames and wired glass; also electric operating devices for the new windows; plans and specifications obtainable from Chief Clerk of Dept.; E. J. Ayers, Acting Asst. Secy.

**Windmills.**—See Electrical Machinery.—A. P. Calfee.

**Wire-forming Machinery.**—Gulf Cup & Still Co., Pensacola, Fla.—Data and prices on automatic wire-forming machinery, suitable for making from No. 9 wire a device not more difficult than hat or coat hook.

**Wood Preserving Equipment.**—A. C. House Lumber Co., Weldon, N. C.—Wood preserving plant equipment.

**Wooden (Turned) Goods.**—Herbert Davies & Co., 68 and 70 Finsbury Pavement, London, E. C., England.—Correspondence with manufacturers of turned wooden goods for domestic use; view to representation.

## FINANCIAL NEWS

### FINANCIAL CORPORATIONS

Ala., Birmingham.—Jefferson County Bank, 2028 2d Ave., chartered and incorporated, capital \$500,000, has elected A. E. Jackson, Prest.; Frank S. White and T. M. Jones of

Decatur, V. P.s; W. C. Sterrill and W. W. Hutton, Asst. Cashs.; Cash. not yet elected. Business began Aug. 2.

Ark., Blytheville.—Steps are reported being taken to organize a national bank with capital of from \$100,000 to \$200,000.

Ark., Green Forest.—Farmers' & Merchants' Bank is chartered. It is reported, to take over the Bank of Green Forest, of which W. L. Sneed is Prest.

Ark., Marshall.—First National Bank of Marshall is approved; capital \$50,000. This is a conversion of the Marshall Bank.

Ga., Savannah.—Wage Earners' Savings Bank has applied for charter; capital \$50,000; incorporators, L. A. Williams, Sol C. Johnson, R. A. Harper, W. H. Burgess and others.

Ky., Livermore.—Reported consolidation of the Farmers' & Traders' Bank and the Bank of Livermore was not perfected.

Ky., Maysville.—State Trust Co., recently inceptd. with \$20,000 capital, has elected Chas. D. Pearce of Louisville, Prest.; E. T. Kirk, V. P.; W. W. Ball, Jr., Secy. and Treas.

Mo., Caruthersville.—First National Bank has made application for charter; capital \$50,000; directors, R. L. Ward, C. F. Bloker, J. J. Long and E. H. Musgrave.

Mo., St. Louis.—Central Bond & Mortgage Co. of St. Louis is chartered; capital \$25,000. Incorporators: Henry J. Fescher, E. A. Bercher and J. J. Frey.

Okla., Tyrone.—Farmers' State Bank, capital \$15,000, is organized by C. E. Woods, Liberal, Kans.; W. J. Risen, Hooker; E. O. Lover, C. W. White and K. W. Huber, Tyrone.

S. C., Mullins.—Union Trust Co. has been granted a commission; capital \$12,000. Petitioners: N. H. Jenerette and W. L. Adden.

Tenn., Shelbyville.—Farmers' Bank has made application to convert into the Farmers' National Bank, capital \$100,000.

Tenn., Winchester.—Farmers Trust Co. is chartered; capital \$10,000. Inceptors: T. A. Embrey, Dick Taylor, H. M. Templeton, L. C. Embrey and Tom Embrey.

Tex., Rotan.—Rotan State Bank has begun business. P. Brady is Prest.; J. C. Hayter, V. P., and O. C. Walker, Cash.

Tex., Valera.—A new bank is being organized by E. C. Harvey of Dallas, Tex.

Va., City Point.—Bank of City Point, inceptd., capital \$20,000, has begun business; capital \$50,000. B. R. Walters, Prest., Washington, D. C., and H. J. Watkins, Jr., Secy., Petersburg, Va. This is a branch of the National Bank of Petersburg.

Va., Crabbottom.—Crabbottom National Bank has made application to organize; capital \$75,000; organizers, Ira W. Nicholas, O. P. Chew, H. L. Simmons, J. F. Stover, G. E. Swecker and H. E. Colaw.

Va., Norfolk.—Church Street Bank, capital \$50,000, has begun business. Benjamin Margolis is Prest.; G. W. Truitt, Jr., V. P., and Nathan Metzger, Cash.

Va., Roanoke.—Magic City Building & Loan Assn. incorporated; capital \$10,000 to \$50,000. Organizers: E. R. Dudley, Prest.; H. C. Johnson, V. P.; Jacob L. Reid and E. I. Becker, Treas.; John L. Stockton, Secy., and A. S. Brooks.

W. Va., Ridgeley.—People's Bank of Ridgeley is reported to have begun business; capital stock \$25,000. L. F. Walker is cashier. R. D. Helronimus of Davis, W. Va., is interested.

### NEW SECURITIES

Ala., Cloverdale.—\$30,000 sewer and street bonds are voted. Address The Mayor.

Ark., Lonoke.—Lonoke county is reported to have sold \$25,000 bonds Road Dist. No. 8. Address County Commrs.

Ark., Benton.—\$90,000 of bonds for water-works have been sold. W. A. Utley is Mayor.

Fla., Arcadia.—\$210,000 6 per cent. 20-30-year Road Dist. No. 1, DeSoto county, road and bridge bonds have been purchased by J. C. Mayer & Co., Cincinnati, O., at 95% and accrued interest.

Fla., Bradentown.—Election is to be held in Manatee county Aug. 17 to vote on \$161,680 Palmetto, Ellenton, Terra Cotta and Gillette Dist. road and bridge bonds. Address County Commrs.

Fla., Bradentown.—\$250,000 bonds Sarasota-Venice Road and Bridge Dist., Manatee county, are soon to be placed on the market. Address H. L. Higley, J. T. Campbell and T. A. Howse, bond trustees.

Fla., Fort Meade.—Bids will be received until 7:30 P. M. Aug. 17 for \$25,500 electric

plant, \$7500 water and sewer, \$25,000 street-paving bonds and \$40,000 to \$50,000 street-paving certificates; interest 5 per cent.; dated May 1, 1915, maturing May 1, 1945. Address Board of Bond Trustees, W. B. Gardner, Chrmn. Further particulars will be found in the advertising columns.

Fla., Ft. Myers.—Election is to be held Sept. 10 in Lee county to vote on \$350,000 road bonds. Address County Commrs.

Fla., Jacksonville.—\$500,000 Duval county school bonds will be put on the market within 60 days. Address County Commrs.

Fla., Kissimmee.—\$70,000 refunding, street, road and bridge bonds to be voted on Aug. 7 are 6 per cents.; denomination \$5000. H. R. May is Mayor.

Fla., Lake Worth.—\$25,000 6 per cent. 20-year light and water bonds are being offered. A. H. Shipman is Vice-Mayor.

Fla., Tallahassee.—Comms. Leon County are taking steps to issue road bonds.

Fla., Titusville.—Bids will be received until 2 P. M. Aug. 11 by J. F. Mitchell, Clerk Brevard county, for \$150,000 6 per cent. Special Road and Bridge Dist. bonds, dated July 1, 1915, maturing 1920 to 1940, inclusive; denomination \$1000.

Ga., Baconton.—Aug. 19 election is to be held to vote on \$6500 school and \$5500 electric-light and water-works bonds. Address The Mayor.

Ga., Caldwell.—\$4000 school and \$3000 water and light improvement bonds recently voted are 20-year 5 per cents.; denomination \$1000. Bonds will be validated about Aug. 7 and then offered for sale. Hiram Mullis is Town Treas.

Ga., Folkston.—No bonds will be issued by Charlton county before June 1, 1916. J. C. Allen is Clerk Supreme Court.

Ga., Ocilla.—Election ordered for July 15 to vote on \$50,000 Irwin county road bonds was called off. Jas. Whitley is County Clerk.

Ga., Tallapoosa.—Bids were received until Aug. 1 by O. E. Pearce, Mayor, for \$35,000 water-works, \$25,000 school and \$5000 sewerage-improvement bonds. Award not stated.

Ga., Toccoa.—\$35,000 5 per cent. electric-light bonds have been purchased at par by Robinson-Humphrey-Wardlaw Co., Atlanta.

Ky., Covington.—H. W. Percival, Commr. of Finance, telegraphs the Manufacturers Record that the \$200,000 of 4½ per cent. water-works-improvement bonds have been sold to J. C. Mayer & Co. and Breed, Elliott & Harrison of Cincinnati at par, accrued interest and \$6000 premium.

Ky., Monticello.—Election ordered for July 24 to vote on \$200,000 Wayne county pike bonds was called off. J. S. Sandusky is County Judge.

Ky., Princeton.—\$25,000 school bonds defeated.

Ky., Whitesburg.—\$3000 6 per cent. Letcher county school bonds are being offered. Address Franklin & Son, Union Bank Bldg. Further particulars will be found in the advertising columns.

La., Abbeville.—\$21,000 bonds Young-Coulee Drainage Dist., Vermilion parish, are voted. Address Board of Commrs.

La., Gretna.—Jefferson Parish Drainage Dist. No. 4 has voted \$60,000 improvement bonds. Address Board of Commrs.

La., Leesville.—\$40,000 Hornbeck School Dist., Vernon parish, school-building bonds are voted. Address Board of Trustees.

Md., Elkton.—\$15,000 5 per cent. Cecil county highway bonds were sold as follows: Elkton Banking Co., Elkton, \$15,000 at 109.125; Hamilton & Co., Baltimore, \$10,000 at 108.399.

Miss., Canton.—\$30,000 street-improvement bonds will probably be issued about Sept. 1. W. L. Dinkins is Mayor.

Miss., Edwards.—\$15,000 road bonds are to be issued. Address Board of Supvrs.

Miss., Meridian.—\$40,000 city hall and jail, \$10,000 sanitary sewer and \$15,000 bridge and drainage 5 per cent. bonds have been purchased by Breed, Elliott & Harrison, Cincinnati, at par, accrued interest and attorney's fee. J. W. Parker is Mayor.

Mo., Fulton.—Election is to be held Aug. 19 to vote on \$50,000 for new high school and \$5000 school repair bonds. Address Board of Education.

Mo., Lexington.—Election Aug. 3 on \$28,000 city improvement 5 per cent. bonds; result not stated; official in charge, C. L. Ristine, City Atty. A. E. Taubman is Mayor.

Mo., Lexington.—Election was held in Lafayette county July 24 to vote on \$6000 school bonds. Result not stated. An issue of \$20,000 school bonds has been sold. Address County Clerk.

Mo., Marshfield.—Highway improvement bonds Seymour Special Road Dist., Webster county, will probably be issued. Address County Commrs.

Mo., New Haven.—\$9700 5 per cent. 5½-year electric-light bonds have been sold over the counter at par. Address The Mayor.

Mo., Webb City.—\$10,000 4 per cent. 5½-year school district building bonds have been purchased at par by the National Bank of Webb City.

N. C., Asheville.—Bids will be received until noon Aug. 10 for \$50,000 5 per cent. \$1000 denomination water bonds, dated July 1, 1915, maturing July 1, 1917, to 1939, inclusive. F. L. Conder is Secy.-Treas.

N. C., Ayden.—Election is to be held Aug. 20 to vote on \$20,000 water-works, \$15,000 sewer and \$15,000 electric-light bonds. Address Board of Aldermen.

N. C., Greenville.—\$30,000 5 per cent. 20-year school bonds have been purchased at par by J. H. Hillsman & Co., Atlanta.

N. C., Wake Forest.—\$10,000 6 per cent. 30-year \$1000 denomination light bonds were voted July 27, and bids for same are now being received. J. C. Caddell is Mayor.

N. C., Warrenton.—All bids received July 27 for \$50,000 5 per cent. \$1000 denomination water and sewerage bonds were rejected; dated July 1, 1915; maturity 1940; R. I. Jones, Secy. and Treas.

N. C., Waynesville.—\$6000 5 per cent. 20-year watershed bonds have been purchased at par, less cost of engraving and accrued interest, by Hanson & Co., Chicago.

N. C., Washington.—\$12,000 6 per cent. bonds Jackson Swamp Drainage Dist. bonds are being offered. Address Harry McMullan, Atty.

Okla., Caddo.—Bids will be received until 2 P. M. Aug. 10 by Board of Trustees, Scott Powell, Prest., for \$20,000 6 per cent. 5½-year pumping-station and filter bonds; denomination \$1000. M. A. Linch is Town Clerk. Further particulars will be found in the advertising columns.

Okla., Okmulgee.—Bids are being received for \$100,000 park bonds recently voted. M. F. Moronig is Mayor.

Okla., Spiro.—No satisfactory bids were received July 12 for the \$10,000 6 per cent. 10-year gaspipe bonds. I. W. Dunklin is Town Treas.

Okla., Stillwell.—\$40,000 courthouse and jail bonds defeated.

S. C., Bethune.—\$9000 5 per cent. 20-year \$500 denomination school-building bonds School Dist. No. 22 were purchased at par by H. G. Garrison, Camden, S. C.

S. C., Camden.—\$9000 5 per cent. 20-year bonds School Dist. No. 22 have been purchased at par by H. G. Garrison of Camden.

Tenn., Columbia.—\$30,000 5 per cent. street-paving bonds have been purchased by the Southern Asphalt & Construction Co., Birmingham, Ala.

Tenn., Rutledge.—Election will probably be called in Grainger county to vote on \$300,000 pike bonds. Address County Commrs.

Tenn., Harriman.—Bids received 8 P. M. Aug. 5 by W. C. Anderson, Mayor, for \$34,000 5½ per cent. funding bonds; denomination \$1000 each; maturity, \$20,000 in 5 years and \$4000 per annum thereafter.

Tenn., Knoxville.—\$42,390.49 6 per cent. 15-year street-improvement bonds have been purchased by J. C. Mayer & Co., Cincinnati, at par, accrued interest and \$644.33 premium.

Tenn., Jacksboro.—Bids will be received until 1 P. M. Aug. 14 for \$7000 5 per cent. 10-year \$500 denomination Campbell county school bonds. Address Wm. Allen, County Judge.

Tenn., Spring Hill.—Bids will be received until 10 A. M. Aug. 7 for \$8000 6 per cent. street-improvement bonds, dated Aug. 7, 1915, and maturing Aug. 7, 1920, to 1935, inclusive. O. P. McKissack is Mayor pro tem.

Tex., Abilene.—Taylor county road bonds defeated.

Tex., Austin.—The Attorney-General has approved the following bonds: City of Brownsville, 5 per cent. 20-40s, \$8000 sewers and \$7000 school; \$22,000 5 per cent. 10-40-year Kaufman water-works; \$7000 5 per cent. 20-40-year Ballinger Independent School Dist.; \$12,000 5 per cent. 10-40-year bonds Dickens county, Road Dist. No. 1; \$3000 5 per cent. 40-year bonds Eustas Independent School Dist., Henderson county; \$5000 street-improvement and \$3000 high-school 5 per cent. 20-40-year bonds, Mineral Wells; \$15,000 5 per cent. 40-year bonds Corpus Christi Independent School Dist.

[For Additional Financial News, See Page 76.]



### Merchants-Mechanics National Bank

South and Water Sts., BALTIMORE, MD.  
DOUGLAS H. THOMAS, President.  
JNO. B. RAMSAY, V.-P. and Chm. Bd. of Dir.  
JOHN B. H. DUNN, Cashier.  
Capital \$2,000,000. Deposits \$21,070,000  
Surplus and Profits \$2,175,000.  
Accounts of Banks, Bankers, Corporations and Individuals solicited.  
We invite correspondence.

Edwin Warfield, President.

### Fidelity and Deposit Company of Maryland

Home Office: Baltimore

Total Assets over \$11,000,000.00.

All Kinds and Classes of Surety Bonds and Casualty Insurance.

Largest and Strongest Surety and Casualty Company in the World.

### First National Bank

RICHMOND, VIRGINIA

Capital and Surplus - - - - \$3,000,000  
JNO. B. PURCELL, President.  
JNO. M. MILLER, JR., Vice-Pres.  
W. M. ADDISON, Cashier.

### JOHN NUVEEN & CO.

First National Bank Building, CHICAGO  
We purchase SCHOOL, COUNTY and MUNICIPAL BONDS. Southern Municipal Bonds a Specialty.  
Write us if you have bonds for sale.

### We Buy Bonds

City, County, School and Road, from Municipalities and Contractors  
WRITE  
THE PROVIDENT SAVINGS BANK & TRUST CO.  
CINCINNATI OHIO

### SPECIALISTS

IN

Southern Cotton Mill Stocks

### BIGELOW & CO.

25 Pine Street NEW YORK

### The Investment Situation

is being subjected to developments of such importance that investors should ascertain from all the data available how these developments will affect the future strength of the various kinds of securities. It is possible we can give information of value regarding certain investments, and we, therefore, suggest that you send the name of any stock or bond you are particularly interested in to our Department No. AG-140, and we will give you the benefit of our opinion without charge.

### A. B. Leach & Co.

Investment Securities

149 Broadway, New York

Chicago Philadelphia Buffalo  
Boston Baltimore London

### THOS. W. TROY & COMPANY

EXPORT AND IMPORT COMMISSION MERCHANTS  
PUERTO CORTES, HONDURAS, C. A.

NEW YORK OFFICE—Purchasing Department, 29 Broadway  
Will represent American manufacturers of small machinery, wagons, logging equipment, tools, supplies and all manufactured articles.

### Delaware Trust Company

WILMINGTON, DELAWARE

INCORPORATING under broad, liberal, safe and stable Delaware laws. A fully equipped department for proper organization and registration of corporations.

BANKING AND TRUST department gives special attention to out-of-town customers' accounts.

TITLE DEPARTMENT examines and guarantees title to realty throughout Delaware.

REALTY DEPARTMENT has sites for manufacturing industries. Modern methods of management of property.

J. ERNEST SMITH, Pres. and Gen. Counsel.  
WM. G. TAYLOR, Vice-Pres. and Treasurer.  
HARRY W. DAVIS, Vice-Pres. and Secretary.  
W. W. PUSEY, 2d Title and Real Estate Officer.

### The National Exchange Bank

OF BALTIMORE, MD.

Hopkins Place, German and Liberty Sts.  
Capital, \$1,500,000.  
March 30, 1915, Surplus and Profits, \$850,000.00.

OFFICERS.  
WALDO NEWCOMER, President.  
SUMMERFIELD BALDWIN, Vice-Pres.  
R. VINTON LANSDALE, Cashier.  
C. G. MORGAN, Asst. Cashier.  
Accounts of Mercantile Firms, Corporations, Banks, Bankers and Individuals Invited.

### The First National Bank

OF KEY WEST, FLA.

United States Depository and Disbursing Agent.  
Capital - - - - - \$100,000  
Surplus and Undivided Profits - 40,000  
A general banking business transacted.  
Special attention given to collections.

### POWELL, GARARD & CO.

39 S. La Salle Street

CHICAGO, ILL.

We buy Southern Municipal Bonds (County, City, School, Road and Drainage District).

### ACCOUNTING SUPERVISION

Accounts periodically audited or supervised by an expert brings complete satisfaction to a progressive Board of Directors.

ALLAN GORDON ARMSTRONG  
Public Accountant  
Suite 649-650-651 New Monroe Building  
NORFOLK, VIRGINIA

### CHESTER H. BUCK

Auditor Expert Accountant  
CHATTANOOGA, TENN.  
Financial Statements Prepared. Business Systems established for new concerns and Old Systems revised and improved. Certified and Sworn Statements Prepared.

### GO SOUTH!

FOR SALE Timber, Coal, Iron, Ranch and Other Properties.  
Southern States, West Indies, Mexico.  
GEO. B. EDWARDS, (Broker)  
Tribune Building, NEW YORK, N. Y.  
Confidential Negotiations, Investigations, Settlements, Purchases of Property.

### Young & Selden Co.

BALTIMORE, MD.

### DESIGNERS

AND

### LITHOGRAPHERS

OF

### High-Class Stationery

FOR

Banks, Mills and Commercial Houses

### We Finance

Electric Light, Power and Street Railway Enterprises  
With Records of Established Earnings

### We Offer

Bankers and Investment Dealers  
Proven Public Utility Securities  
Correspondence Solicited

### Electric Bond and Share Company

(Paid-up Capital and Surplus, \$14,500,000)

71 Broadway

New York

### We Buy

City, County School and Drainage

### BONDS

FROM MUNICIPALITIES OR CONTRACTORS  
We are in position to pay HIGHEST PRICES.

Write or Wire Us Your Offerings

THE NEW FIRST NATIONAL BANK Assets, \$8,000,000 COLUMBUS, O.

### COTTON YARNS

Paulson, Linkroum & Co.

COMMISSION MERCHANTS

NEW YORK

PHILADELPHIA

CHICAGO

87-89 Leonard Street

120 Chestnut Street

206 South Market Street

### A FORTUNE TO THE INVENTOR

who reads and reads it, is the possible worth of the book we send for 6c. postage.  
Write us at once.

R. S. & A. B. LACEY

Dept. 5

Washington, D. C.

### BLACK & COMPANY

(WILMER BLACK, C. P. A.)

CERTIFIED PUBLIC ACCOUNTANTS and AUDITORS

All Work under Personal Supervision of Maryland Certified Public Accountant

Suite 1208 Garrett Building  
BALTIMORE, MD.

### The Cutler Mail Chute

A recognized necessity in modern buildings of the office, hotel and apartment class.

Send for circulars and full information to the sole makers:

CUTLER MAIL CHUTE CO.

Rochester, N. Y.

### To Manufacturers and Capitalists

Contemplating the Establishment of Industrial Enterprises

Attention is called to the exceptionally favorable location of

### NEWPORT NEWS, VA.

on Hampton Roads, fifteen miles from the sea. deep water, railway and sea transportation facilities unrivalled. Climate salubrious. Apply to

W. B. LIVEZEY, President

OLD DOMINION LAND COMPANY  
NEWPORT NEWS, VA.

### Capital for Southern Industries

### Peabody, Houghteling & Co.

Established 1865:

10 So. La Salle Street

CHICAGO, ILLINOIS

### Temporary Financing of States, Cities and Counties Pending Issuance of Bonds

ALSO ENTIRE ISSUES OF BONDS PURCHASED

Largest Capital and Surplus of Any Financial Institution in Maryland or Any Southern State

Established 1864

Resources Sixteen Millions

### MERCANTILE TRUST AND DEPOSIT COMPANY OF BALTIMORE

A. H. S. POST, President

F. G. BOYCE, Jr., Vice-President

# HASKINS & SELLS

## CERTIFIED PUBLIC ACCOUNTANTS

30 Broad Street, NEW YORK

WATERTOWN  
ST. LOUIS

BALTIMORE  
ATLANTA

PITTSBURGH  
DENVER

CLEVELAND  
SAN FRANCISCO

CHICAGO  
LONDON, E. C.

Cable Address "HASKSELLS"

Announce the Opening of an Office at  
**ATLANTA—Mr. L. C. Matthews, Manager**

And an Office at  
**DENVER—Mr. C. H. Banks, Manager**

Tex., Ballinger.—\$8000 of Ballinger School Dist., Rannels county, bonds have been sold. M. Kleburg is County Judge.

Tex., Canadian.—\$74,000 Hemphill county bridge bonds have been sold at par and accrued interest. Address County Commrs.

Tex., Cold Springs.—\$75,000 bonds Road Precinct No. 2, San Jacinto county, are voted. Address County Commrs.

Tex., Dallas.—\$250,000 of sewer bonds, being balance of an issue of \$550,000, are soon to be placed on the market. Address The Mayor.

Tex., Hubbard.—Question of issuing road-

improvement bonds is being considered. Address The Mayor.

Tex., Jefferson.—Election is to be held Aug. 17 to vote on \$28,000 bonds School Dist. No. 7, Marion county. Address Board of Trustees.

Tex., Kaufman.—\$300,000 Terrell Dist., Kaufman county, road bonds have been purchased by three banks of Terrell. Address County Commrs.

Tex., Orange.—\$150,000 wharf and dock, \$150,000 school and \$25,000 street-improvement bonds, recently voted, are 20-40-year 5 per cents. K. A. Mitchree is City Secy.

Tex., Port Lavaca.—\$17,000 street bonds are voted. Address The Mayor.

Tex., Robstown.—\$158,380 5 per cent. 20-40-year drainage district bonds voted last June will be put on the market after Aug. 9. Address C. C. Grendle.

Tex., Santa Anna.—\$6000 of 5 per cent. 30-year sewer-system bonds are voted; denomination \$500. Date for bids not yet set. Address Mayor and Aldermen or W. F. Holland.

Tex., Taylor.—\$100,000 5 per cent. 40-year street-paying bonds have been purchased by A. E. Poebelman of Galveston at par.

Tex., Port Lavaca.—\$16,350 drainage bonds are voted. Address The Mayor.

Tex., Victoria.—Bids will be received until 5 P. M. Aug. 30 for \$30,000 bridge and street improvements, \$30,000 10-40-year fire station and \$40,000 5-40-year electric-light 5 per cent. bonds. Denomination \$500. Dated July 1.

1915. J. H. Fleming is Mayor and C. A. Wertheimer, City Secy. Further particulars will be found in the advertising columns.

Va., Abington.—Washington county contemplates issuing \$100,000 road and bridge bonds. Address County Commrs.

Va., Buckingham.—\$40,000 5 per cent. 20-year \$500 denomination Buckingham county road bonds have been purchased at par, with accrued interest, by Baker, Watts & Co., Baltimore.

Va., Charlottesville.—\$75,000 5 per cent. 20-year school bonds are voted. A. V. Conway is Mayor.

W. Va., Grafton.—Election is to be held Aug. 17 to vote on \$15,000 hospital bonds. Address The Mayor.

W. Va., Huntington.—\$300,000 of Cabell county 5 per cent. 30-year road bonds have been purchased by A. B. Leach & Co., New York and Chicago; Otis & Co. and Tillston & Wolcott of Cleveland, at par, accrued interest and premium of \$1,671.37.

W. Va., Keyser.—Election is to be held Aug. 14 to vote on \$35,000 6 per cent. 10-34-year school bonds, dated July, 1915, and maturing July 1, 1949. Address Board of Education, Chas. N. Fennell, Pres.

W. Va., Hinton.—Election is to be held in Summers county Aug. 28 to vote on \$150,000 Greenbrier Dist. and \$100,000 Talcott Dist. 5 per cent. 5-32-year road and bridge bonds. J. M. Carden is County Clerk.

W. Va., Philippi.—\$20,000 light, paving and sewer bonds are voted. Address The Mayor.

ing work and surveying, including designs for reinforced concrete and steel structures. The new firm will be known as Wagner & Monniche and will open offices at 604 Kries Bldg., Lynchburg, Va.

### Makes Large Shipment of Electric Ranges.

The Hughes Electric Heating Co. of Chicago is said to have recently made the first carload shipment of electric ranges ever consigned to a Missouri town. They were purchased by the Missouri Public Utilities Co. of Poplar Bluff, which is a subsidiary of the Light & Development Co. of St. Louis. As a 3-cent cooking rate has been established by this company, many electric ranges have been placed in Poplar Bluff, thirty-eight being sold during the month of May alone.

### Installs Diesel Engine.

A 100 horse-power, six-cylinder vertical oil motor of the Diesel type, manufactured by the Fulton Manufacturing Co., Erie, Pa., has been purchased by Captain W. D. Haden of Galveston, Tex., and will be installed in the motor tug Willie. Advantages of this type of engine are its economical fuel consumption and its ability to run on a low grade of crude oil. Fuel consumption for this particular size is said to be 6 1/2 gallons of oil per hour, costing about 12 1/2 cents an hour to operate.

### Moore Moist Air Kilns.

Krause & Managan Lumber Co., Westlake, Fla., has closed contract with the L. Moore Drykiln Co., Jacksonville, Fla., to convert into two modern kilns of the Moore moist-air system three old kilns of another type. Another order recently secured by the Moore Drykiln Co. includes the rebuilding under the moist-air system of the burned drykilns of the Weldon Lumber Co., Weldon, N. C., making a total of sixteen Moore kilns that have been bought by the Weldon company in the last few years for its mills.

### Office Space Increased.

Within the last four months the S. K. F. Ball Bearing Co., importer of S. K. F. bearings, manufactured at Gothenburg, Sweden, has practically doubled its offices on the sixth floor of the Hudson Terminal Bldg., 50 Church St., New York, in order to take care of the great demand for these imported bearings. Probably this is the only company in this country importing bearings from Europe that has not been interfered with by the war, as Sweden, being a neutral country, is enabled to send regular shipments via Norway and Denmark without entering the war zone.

### Stock of Electrical Supplies for Sale.

Entire stock of electrical supplies, including electric and gas fixtures, electric bells, fans, battery sets, conduits, fittings, spark plugs, telephones, heating and cooking appliances, motors, shears, drill presses, saws, large assortment of shafting, pulleys, hangers, belting, etc., of the Wilson-Maltman Electric Co., 30 S. Charles St., Baltimore, will be offered for sale August 10 and 11, 1915, by N. B. Lobe & Co., auctioneer.

### Adjustable Car Step.

James H. Vaughan of Mobile, Ala., has secured a patent on an adjustable car step. The step is said to have already proved useful and works in a highly satisfactory manner. It is rather a simple device, easily manipulated and is claimed to fill a long-felt need of the railroads and the traveling public in supplanting the old-fashioned stool or box which has been in use on all railroads for

[Continued on Page 80.]

## PROPOSALS.

### Sanitary Sewerage System

Ocala, Fla.

Sealed proposals will be received by the City Council of Ocala, Florida, at the office of the City Clerk, for the construction of a sanitary sewerage system, until September 14, 1915, at which time they will be opened and read publicly. The work includes the furnishing of all labor, material and machinery, and equipment of every kind necessary to construct the above work according to plans and specifications. The approximate quantities are as follows:

- 5,788' 6" Sewer Pipe.
- 101,315' 8" Sewer Pipe.
- 8,145' 10" Sewer Pipe.
- 2,215' 12" Sewer Pipe.
- 3,180' 15" Sewer Pipe.
- 260' 18" Sewer Pipe.
- 237' Manholes.
- 51 Automatic Flush Tanks.
- 37 Hand Flush Tanks.
- Necessary Y Branches.
- 1 Sewerage Disposal System.

Each bid must be accompanied by a certified check on any State or national bank of Florida or on a national bank of any other State for 5 per cent. of the amount bid, drawn to the order of the President of the Council, J. M. Meffert.

The bonds have been sold and payments for work will be made in cash.

It is the desire of the City Council to let the contract as a whole to one contractor, but they reserve the right to segregate and let in sections if it be to the best interests of the city.

Plans and specifications may be seen at the office of the City Clerk or the Engineers. Bidding blanks may be obtained from the Engineers or City Clerk. Copies of plans and specifications may be obtained from the Engineers at \$5 per set to cover their actual cost.

The right is reserved to reject any and all bids.

J. M. MEFFERT,  
President City Council.  
H. C. SISTRUNK,  
City Clerk.

THE J. B. McCARY CO., Engineers,  
1408-17 Third National Bank Bldg.,  
Atlanta, Georgia.

### Construction of Courthouse

Madison, W. Va.

By virtue of an order made and entered of record by the County Court of Boone County, West Virginia, on the 9th day of July, 1915, the undersigned, Clerk of said Court, will receive sealed bids on behalf of said Court until noon of August 10, 1915, for the construction of a Courthouse for said Boone county, on the site deeded to the said Court by Julian Hill and wife, according to the blueprints, plans and specifications for such Courthouse prepared by H. Rus Warne, architect, and now on file in the office of said architect in the City of Charleston, West Virginia. Bids will be considered either for the completion of the building as a whole, or for the completion of the outside work and the inside work separately. At 2 o'clock P. M. of August 10, 1915, all bids will be opened and considered by the Court.

The Court reserves the right to reject any and all bids, and before a final contract is closed the contractor will be required to give a bond, with good security, in a penalty to be fixed by the said Court, conditioned for the full and faithful performance of said contract.

Addenda: The time for receiving the above bids has been extended from August 10 to August 24 at noon.

Given under my hand this 3d day of August, 1915.

ELMER NELSON,  
Clerk of said County Court.

## INDUSTRIAL NEWS OF INTEREST

Items of news about industrial, railroad or financial interests, building operations, construction work, municipal improvements, or the sale of machinery or the letting of contracts in the South or Southwest, are invited from our readers whether they are advertisers or subscribers or not. We invite information of this character from readers in the North and West about their Southern business operations, as well as from Southern readers. News of value will be published just as readily when from non-advertisers as from advertisers.

### Moves to Allentown, Pa.

Announcement is made that the offices and works of the Bradley Pulverizer Co. of Boston, Mass., after August 1, will be located at Allentown, Pa. At this point the company will continue the manufacture of a complete line of mills for pulverizing rock, limestone, lime, gypsum, cement, coal, slag, bone, etc.

### Texas Shovel Handle Factory.

George W. Pitman Company, Dennison, Tex., has resumed manufacturing D shovel handles and anticipates having a steady run of its plant. Because of war and other conditions the company closed last September with its warehouses full of handles, these having now been sold and plenty of orders being on file. This is the first long shutdown the company has experienced in its thirty years of activity in handle manufacture.

### Electricity on the Farm.

Charles H. Roth of Roth Brothers & Co., Chicago, predicted before the National Gas Engine Association, held in Chicago recently, that the sales of farm-lighting apparatus will shortly increase at a wonderful rate, as the farmer, after buying an automobile, must have other conveniences, such as electric lights, in his home and farm buildings. In speaking on this subject Mr. Roth said: "It takes time to properly introduce all new things, but it may be expected that the demand for farm-lighting equipment in the near future will be enormous. To handle

this vast business properly as it grows, it is of vital importance that every manufacturer of gas engines, every jobber and every dealer be thoroughly posted on the use of electricity on the farm."

### Vacuum Cleaner Wins Grand Prize.

At the Panama-Pacific Exposition the International Jury of Awards has conferred the highest honor within its power—the Grand Prize—on the United Electric Co. of Canton, O., manufacturer of "Tuc" stationary cleaners. We are advised that the "Tuc" has achieved the highest score in every one of the competitive engineering tests in which it has ever entered, of which the Panama-Pacific Exposition is the culminating effort.

### Central Foundry Co.'s Atlanta Office.

In order that there would be no conflict of territory, and that its sales office could be in closer touch with its customers, the Central Foundry Co., manufacturer of pipe, fittings and general castings, 90 West St., New York, has opened an Atlanta office in the Trust Company of Georgia Bldg., in charge of C. F. Blount. This territory was formerly controlled from the Bessemer (Ala.) plant of the company.

### Wagner & Monniche.

Richard F. Wagner and Carl Monniche, former engineers on the Panama fortifications and the Panama Canal, respectively, announce a general co-partnership for the performance of every character of engineer-

93

Special  
Po  
GermFo  
crete  
SI  
1504

SC

PHI

150

GL

RE

Rep

Hogu

C  
E  
CHAR

Exam

55 Lib



# Architects, Engineers, Chemists, Contractors.

## Ford, Bacon & Davis Engineers

115 Broadway, New York  
New Orleans San Francisco

## Mill Architect and Engineer

SPECIALTY:

Textile Mills and Water Power Developments  
J. E. SIRRINE GREENVILLE, S. C.

## ARTHUR D. LITTLE, Inc.

ESTABLISHED 1886

The oldest, largest and best equipped organization of Chemists and Engineers in the country for the investigation of conditions affecting the efficiency and economy of industrial operations.

93 Broad Street

BOSTON



## Stone & Webster Engineering Corporation

CONSTRUCTING ENGINEERS

NEW YORK

BOSTON

CHICAGO

## ATLANTIC ENGINEERING COMPANY CIVIL ENGINEERS

Specialists on Land Drainage, Real Estate Developments, Highways, Bridges, Water Powers, Steam and Electric Railroads. Railroad Valuation, General Appraisals. Germania Bank Building SAVANNAH, GA.

## THE J-G-WHITE COMPANIES

ENGINEERS

CONTRACTORS

FINANCIERS

OPERATORS

43 EXCHANGE PL.



NEW YORK

## WILLIAM C. SPIKER, C. E. CONSULTING ENGINEER

Foundations, Steel and Concrete Skeletons for Skyscrapers and Heavy Buildings; Steel and Concrete Bridges, Dams, Flumes, Canals, Surveys, Estimates, Reports, Waterpower Developments. SPECIALTY—Plans and Superintendence for Complicated or Difficult Construction Work. 1504-6-8 Hurt Building ATLANTA, GA.



## GRAVES ENGINEERING CO., Inc.

MANAGE, CONSTRUCT, FINANCE

PUBLIC UTILITY PROPERTIES

Examinations and Reports. Rate Specialists.

35 PINE STREET

NEW YORK

## SCOFIELD ENGINEERING COMPANY CONSULTING AND DESIGNING ENGINEERS

ALL CLASSES PUBLIC UTILITIES

PHILADELPHIA

PENNSYLVANIA

## G. B. HOWARD & COMPANY ENGINEERS

Surveys—Reports—Construction—Interurbans—Highways  
Municipal Improvements

150 4th Avenue N

NASHVILLE, TENN.

## DREDGING

RIVER AND HARBOR IMPROVEMENTS

Hydraulic Fills Land Drainage Dock Construction

GLOBE DREDGING CO.

Savannah, Ga.

## RENSHAW & BREECE

Huntington, West Virginia  
Reports on Oil and Gas Properties

## Robert M. McCandlish Eng'g. Co.

ENGINEERS and ARCHITECTS  
Cold Storage Ice Making Refrigeration  
Midland Building KANSAS CITY, MO.

## Hogue Engineering Association ENGINEERS

Civil Mining Municipal  
Electrical Hydraulic Geologists  
CHARLESTON WEST VIRGINIA

New York City 100 William St.

NICHOLAS S. HILL, Jr.

AND

S. F. FERGUSON

Consulting Engineers

Water Supply and Sewage Disposal  
Evaluations and Reports

Laboratory for Analysis of Water  
and Sewage and for Testing Cement  
Sands, Coal and Metals.

Steam and Hydraulic Power Plants.

## H. E. MOLE Engineer

Examinations, Estimates and Reports. Plans and  
Specifications.  
Lighting and Power Properties.  
55 Liberty Street NEW YORK

## FOSTER & CREIGHTON COMPANY

Engineers and General Contractors

NASHVILLE, TENNESSEE

Steel and Concrete Construction Sawn, Planed, Turned and Cut Stone  
Crushed Stone and Darlington Oolitic Dimension Stone.

## SAVANNAH ENGINEERING & CONSTRUCTION CO.

SAVANNAH, GEORGIA

Engineers and Constructors

## R. M. HUDSON

Paving Contractor

422-423 Healey Building

ATLANTA, GA.

REFERENCES—THE LEADING CITIES OF THE SOUTH

## THE J. B. McCRARY COMPANY

ENGINEERS

ATLANTA, GEORGIA

MUNICIPAL IMPROVEMENTS

Southern work only. Have built over half of the Water, Light and Sewer Systems in Georgia and Alabama. We design—Finance—Superintend. Bonds Purchased.

# Architects, Engineers, Chemists, Contractors.

## TUCKER & LAXTON

CONTRACTING ENGINEERS

Filters, Concrete Work, Hydro-Electric and Steam Electric Construction  
CHARLOTTE, NORTH CAROLINA

## CUNNINGHAM CONSTRUCTION COMPANY

Consulting and Construction Engineers

Complete from Foundation to Plant in Operation Also Steel and Concrete Bridges  
OFFICE AND PLANT: SHREVEPORT, LOUISIANA  
100 TO 110 MARSHALL STREET

## THE S. R. SMYTHE COMPANY

ENGINEERS PITTSBURGH, PA. CONTRACTORS  
Steel Works, Rolling Mills, Blast Furnaces, Hot Blast Stoves, Furnaces for all  
Purposes. Operated with Producer Gas, Natural Gas, Oil or Pulverized Coal.  
Coke Ovens. Gas Producers. Hand Operated or Mechanical.  
The Valve of the Era. SCHILD SLIDING GAS AND AIR REVERSING VALVES

## THOMPSON & MOSELEY, Inc.

Contracting Engineers

Greensboro, N. C.

### DRAINAGE

## ALLEN-SCALES ENGINEERING COMPANY

ENGINEERS AND CONTRACTORS

Water Works

Power Plants

Heating and Ventilation  
Stahlman Building NASHVILLE, TENN.

## HOWARD S. GRIMES

General and Consulting Purchasing Agent

for all lines of merchandise for manufacturers, cotton mills and contractors.  
Accounts Solicited. Best References.

429 Law Building

BALTIMORE, MD.

## ARCHITECTS

## ENGINEERS

Your professional card on these pages will place you in direct and constant touch with those actively in charge of every phase of construction and development work in the South and Southwest.

MANUFACTURERS RECORD

## VIRGINIA POLYTECHNIC INSTITUTE

AND  
AGRICULTURAL AND MECHANICAL COLLEGE  
BLACKSBURG, VIRGINIA

Thirteen degree courses in Agriculture Engineering and Applied Science. Two-year course in Agriculture and Farmers Winter Courses.  
Apply to Registrar for Catalogue. J. D. EGGLESTON, President.

## CONVERSE COLLEGE

SPARTANBURG, S. C.

is one of the only six women's colleges in the South honored by membership as a standard college in "The Association of Colleges and Preparatory Schools of the Southern States." Its B. A. degree is accepted by the highest grade Colleges and Universities and admits, without further work, to candidacy for the M. A. degree. It has separate science, music, and library buildings; dormitories limited to 190; gymnasium and infirmary; 42-acre campus; and 38 teachers and officers. It is thirty-five miles from the Blue Ridge mountains, and has an ideal winter climate. It owes no debts, and has an endowment. It is accessible North, East, South, and West by six lines of railway. If you wish a catalogue, address

ROB'T P. PELL, Litt. D., President

Spartanburg, S. C.

[Continued from Page 76.]

many years. Its advantages are numerous and obvious. The step is attached to the regular pair or set of teps on any car, placed at the bottom of the stair, and readily lowered or raised as required by a simple motion of a lever. When raised and not in use the step is immediately below and next to the stair, but when lowered it takes a position about midway between the station platform and the next step above, enabling the passenger to board or alight from a car with a sense of security not enjoyed when using the narrow box as a bottom step and having to calculate the exact position of the box or stool so that he would not miss it altogether or have it turn over with him.

### New Machinery and Supply Company

Charles F. Cole, president and treasurer of the Virginia Machinery & Well Co., 1319 E. Main St., Richmond, Va., which was recently incorporated with an authorized capital of \$50,000, writes to the Manufacturers Record that his company will contract for the drilling of artesian wells along the Atlantic seaboard and will specialize in country water supply systems of various kinds. Agency has been secured for the Goulds Manufacturing Co. of Seneca Falls, N. Y., for its hand, triplex and centrifugal pumps in Virginia and North Carolina, and the company will make a specialty of electric-driven pumps for country water systems for shallow or deep wells in conjunction with the modern pneumatic tank water supply systems and power pumps for manufacturing plants and municipalities. His company will also represent the Canada Carbide Sales Co., 30 Church St., New York, and in the mill and supply line will have the agency for leather belting manufactured by the Page Belting Co., Concord, N. H.; rubber-goods of the Diamond Rubber Co., Akron, O.; power transmission equipment of the Roversford (Pa.) Foundry & Machine Co., and will carry a stock of Crane fittings exclusively manufactured by the Crane Co., Chicago, Ill.

### York Machinery Installations.

Between June 19 and July 22 the York Manufacturing Co., York, Pa., reports the following ice-making and refrigerating machinery installations in the South: H. L. Stevens, El Paso, Tex., one 6-ton refrigerating machine and high-pressure side, complete; Union Bridge (Md.) Electric Manufacturing Co., one 20-ton machine and high-pressure side, also a 10-ton raw water flooded freezing system and direct expansion piping; Morley & Son, McGehee, Ark., one 40-ton machine and condensing side, also a 25-ton freezing system and 900 feet of piping; Citizens' Ice & Coal Co., West Point, Va., one 12-ton machine and high-pressure side, also a 7-ton freezing system and expansion piping; Jackson Lumber Co., Lockhart, Ala., one 35-ton refrigerating machine and condensing side, also a 15-ton freezing system and extra heavy expansion piping; Fort Gaines (Ga.) Ice Co., one 6-ton machine and condensing side, complete, with motor and belting, also a 4-ton freezing system and expansion piping; DeBardeleben Coal Co., Sipsey, Ala., one 6-ton refrigerating machine and high-pressure side, complete, also a 3-ton freezing system for ice-making and cold storage at mine store; Southern Dairy Co., Petersburg, Va., one 4-ton refrigerating machine and high-pressure side, complete; Doscher-Gardner Co., Jacksonville, Fla., one 20-ton machine direct connected and high-pressure side, complete; Thomas F. Ryan, Arrington, Va., one 12-ton refrigerating machine and high-pressure side, complete, installed by West-erberg & Williams of New York; Ward Baking Co., Baltimore, one 6-ton machine and high-pressure side; Hotel Hamilton, Hagerstown, Md., one 2-ton machine and high-pressure side, complete, and Armour & Co., Fort Worth, Tex., one 36x33-inch horizontal double-acting York ammonia compressor.

### TRADE LITERATURE

#### American Roller Bearings.

Bulletin No. 1002, issued by the American Roller Bearing Co., Pittsburgh, Pa., describes in detail the design and construction of roller bearings which are produced by this company for power transmission appliances. American roller bearings are applied to line shaft hangers, pillow blocks and other transmission devices.

#### Mecan Garages.

A catalogue which has been issued in the interest of automobile owners, in an effort to point out to them the advantages of hav-

ing their own private garages, is now being distributed by the Moeschl-Edwards Corrugating Co., Inc., Covington, Ky. In it is given a variety of the plain and ornamental garages manufactured, with illustrations and detailed descriptions of their construction.

#### Composition Products.

Detailed formulas and directions for the manufacture, use and care of sanitary composition products, with explicit instructions for mixing, applying and finishing composition flooring, base, etc., also for artificial marble, tiles, novelties and other products, are given in a book issued by the Tova Supply Co., of Cleveland, O. While this book is of small size, it contains a great amount of practical and very valuable information in condensed form, which will be greatly appreciated by all those identified in this rapidly growing industry. Price of the book is \$3.

#### Clothing Manufacturers' Directory.

American report and directory of the clothing manufacture and cutting-up trade, which is published by the Dockham Publishing Co., 6 Beacon St., Boston, Mass., is now being issued for 1915. In addition to the complete directory of the clothing and jobbing trade, the book contains information regarding the kind of goods made and other valuable manufacturing information, as well as a list of department stores in the United States. The directory is cloth-bound, contains 384 pages and sells for \$5, express prepaid.

#### Westinghouse Bulletins.

"Logging by Electricity," "Helping the Woodworker" and a bulletin on "Small Motors" are among the publications issued by the Westinghouse Electric & Manufacturing Co., East Pittsburgh, Pa. Catalogue No. 3002-A describes and illustrates a logging camp using Westinghouse electric equipment. In the pamphlet on woodworking, increase in production, decrease in cost and quality improvement are the subjects treated that are of vital interest to the woodworking industry, and the "Small Motors" Bulletin No. 23 describes the advantages to be found in the designs of the small motors manufactured by the Westinghouse company.

#### Street Flushers and Sprinklers.

Contractors, city engineers, boards of control and city purchasing agents should be interested in a catalogue issued by the Tiffin Wagon Co., Tiffin, O., in which its line of street sprinklers, flushers and other municipal vehicles, including sanitary carts, dump wagons, etc., are illustrated and described. The sprinkling and flushing machines illustrated embrace not only the horse-drawn apparatus of gravity and automatic types, but gasoline motor pressure flushers and sprinklers, mounted either on horse-drawn gear or Tiffin motor chassis. Where stand-pipe or hydrant filling are not available, the Tiffin auto flusher, by a special attachment, pumps its own charge from rivers or streams.

#### Carbo Steel Poles.

Steel poles for telephone, telegraph, trolley and transmission lines and signal service work, manufactured by the Carbo Steel Pole Co., Rand McNally Bldg., Chicago, are illustrated and described in a catalogue recently issued by the company. Carbo steel poles are said to be the result of a number of years of scientific and practical investigations and tests, producing a design based on principles, simple though entirely different from any heretofore used in this service. Utilization of high carbon steel, the adoption of a form of construction designed especially to resist strains across the line, anchorage beneath the ground by the Carbo base, earth cushioning at the ground, are the three principal features embodied in the Carbo steel pole system.

#### Roll Cutting and Rewinding Machines.

Paper roll cutting, slitting and rewinding machines manufactured by the Cameron Machine Co., 57-61 Poplar St., Brooklyn, N. Y., are illustrated and described in a catalogue issued by the company. In this catalogue is given the history of the development of Cameron cutting and rewinding machines, with illustrations and diagrams describing the Universal type. Materials handled by the apparatus, in addition to the paper cutting and rewinding, include all kinds of cotton and textile goods, cotton duck for belting, automobile tires, etc., rubber, thin sheet lead and tin foil, tire tape, insulating material, adhesive plaster, as well as carpet and linoleum cutting and rewinding.



### Dyke's Automobile and Gasoline Engine Encyclopedia.

Fourth revised and enlarged edition of the automobile and gasoline engine encyclopedia, published by A. L. Dyke, St. Louis, Mo., is now ready for distribution. The book is prepared with the idea of presenting in clear, simple form the principles upon which gasoline engines and automobiles are operated and built, and to explain in detail all that an operator must understand in order that he may operate and care for any make of car or gasoline engine. It contains 640 pages, with a supplement of 32 pages devoted entirely to the Ford car; 1750 illustrations and 29 charts, with a dictionary and index treating on the construction, operation and repairing of automobiles and gasoline engines. The price of the encyclopedia is \$3.

### Graphite Brushes.

Operators of electric power machinery are interested in the subject of commutation, and are fully aware of its importance in the electrical field. A large percentage of breakage in the present day motor or generator must be charged against improper operation of commutator and brushes. Graphite brushes are designed and marketed with the express purpose of reducing commutator troubles to a minimum. A booklet, "Dixon's Graphite Brushes," explains how the characteristic lubricating qualities of graphite are utilized to this end. An electrical-service department for the solution of brush problems invites detailed statements and will advise whether Dixon's brushes are adapted to the stated operating conditions. A copy of the booklet may be obtained free upon request from the Joseph Dixon Crucible Co., Jersey City, N. J.

### Road-Building Bulletin.

Realizing the growing need for an exhaustive bulletin covering location, building and maintenance of roads, the Du Pont Powder Co. of Wilmington, Del., has published a comprehensive treatise on this subject for free distribution. Although the obvious purpose of the publication is to promote the rational use of explosives in road work, a general discussion of the need of permanent roads and highways and their relation to civic and economic progress is given in the introductory and the text contains recommendations for permanent location and the width and character of road desirable under different conditions, advice regarding the removal of stumps and boulders, drainage work, etc. A chapter is also devoted to road-building equipment and special attention is given to the use of road-surfacing materials.

### Carnegie Shape Book.

The fifth edition of the Shape Book, issued by the Carnegie Steel Co., Carnegie Bldg., Pittsburgh, Pa., contains a complete line of all the products manufactured in the shape, plate, bar and rail mills of the company, with a few unimportant exceptions, and is indicative of the variety of forms now made in rolled steel. Comparisons of this edition with the fourth, issued in 1911, will show roughly the progress of the introduction of steel in varied lines within the past four years. Among the relatively new lines of manufacture will be noted very many new sash and casement sections used in construction of metal window frames, skylights, etc., and a large number of automobile sections, together with a line of light-weight beam sections, distinguished from the American standard sections by the designation of structural beams. The book is printed on special light-weight thin paper and is attractively bound in green leather with gilt edges. Copies may be procured at the price of \$1.

### Mathematical Analysis of Wind Stresses.

"Wind Stresses in the Steel Frames of Office Buildings," by W. M. Wilson and G. A. Maney, has just been issued as Bulletin No. 80 of the Engineering Experiment Station of the University of Illinois. In designing an office building it is necessary to determine the stresses in the steel frame due to the wind pressure on the side of the building. There are a number of methods used to determine these stresses, and they are all known to be more or less accurate. This bulletin is said to present a more accurate method and demonstrates the inaccuracy of the methods used. The bulletin also presents a new approximate method, which is claimed to be more exact than the present methods. The numerical values of the stresses are determined in a symmetrical three-span bent, twenty stories high. Copies of Bulletin No. 80 may be obtained gratis upon application to C. R. Richards, acting director of the Engineering Experiment Station, University of Illinois, Urbana, Ill.

### International Harvester Publications

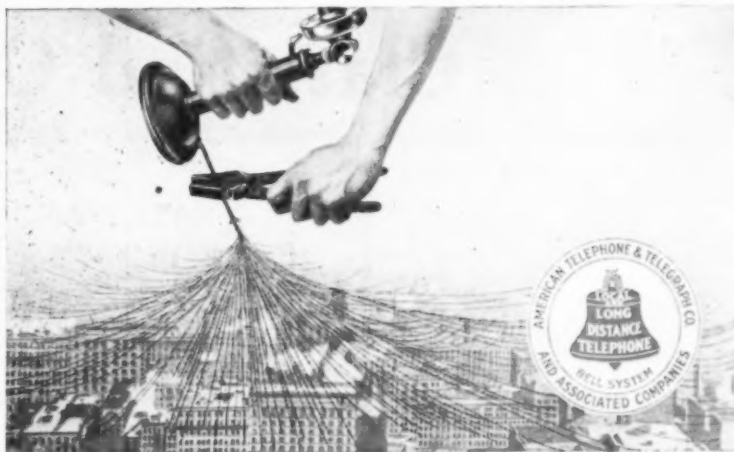
A greater part of the July issue of "The Harvester World," which is published monthly by the International Harvester Co., Harvester Bldg., Chicago, Ill., contains a general survey of the company's large exhibits at San Francisco and San Diego. Many illustrations showing the displays of the harvesting and other machinery manufactured are included in this number. A handsome souvenir booklet of the Panama-Pacific and Panama-California expositions is being distributed at the company's booths. In the booklet is given a historical sketch of the Panama Canal, with illustrations of its principle features and a brief description of both expositions with complete illustrations and detailed description of the company's exhibits. Another recent publication has been issued by the company, entitled "We Must Feed Ourselves." In this pamphlet are shown reasons why the South needs to turn its attention to diversified crops and not depend upon a one-crop system. How some States are meeting this question is discussed at length in the pamphlet.

### Overland Route Guidebook.

Department of the Interior, United States Geological Survey, has recently published Bulletin No. 612, entitled, "Guidebook of the Western United States, Part B. The Overland Route, with a Side Trip to Yellowstone Park." The present stimulus given to travel in the home country will encourage many thousands of Americans and others to study geography at first hand, and the material for this book was gotten together and published in order to make this subject more profitable to the traveler who needs a handbook that will answer the questions that come to his mind so readily along the way. The book is educational in purpose, but the method adopted is to entertain the traveler by making more interesting what he sees from the car window. The plan is to print a series of guidebooks, covering four of the older railroad routes west of the Mississippi, and to present authoritative information that may enable the reader to realize adequately the scenic and material resources of the region he is traversing, to comprehend correctly the basis of its development, and above all to appreciate the real value of the country he looks upon. Illustrations, maps and charts of various kinds explain the text thoroughly. Limited printing appropriations make it impossible to print an adequate free edition, so, with the exception of a small number of copies, the guidebook will be sold (since there is no provision under the law by which a Government book can be handled through the usual commercial book-selling channels) by the Superintendent of Documents, Washington, D. C., at \$1 a copy. Other editions are Part A, Northern Pacific Route; Part C, Santa Fe Route, and Part D, Shasta Route and Coast Line.

### Marion Steam Shovels.

"Marion Reliability and Your Profits" is the title under which the Marion Steam Shovel Co., Marion, O., is now distributing its latest catalogue, No. 93. This publication presents interesting facts, figures and photographic illustrations of Marion equipment for all classes of contractors' work, including street grading, sewer construction, foundation digging, railroad construction, road building, mining developments, etc. In referring to the various classes of contractors' activity in which Marion steam shovels, dredges, ballast unloaders, etc., are used, the company says: "Marion shovels, while good always, are very often chosen when absolute dependability is necessary. In your business you must count on many varying conditions—the number of contracts that are going to be let, the weather situation, the available labor supply, and so on. These considerations and others can make your profit and your losses shoot up and down like the inside of a barometer. You must have something to equalize things, hold them steady; you must render yourself reasonably independent of competition, by reducing your costs so you can figure low; you must be independent of weather by providing equipment that enables you to make use of every minute of fair days; and at least somewhat independent of help by doing more by steam power and less by man and horse-power. You will ask what equipment can give you this advantage. We would not answer offhand without knowing more about your working conditions, but we do know that scores and hundreds of contractors using Marion shovels have reduced their costs and made their profits more sure; and we shall be more than glad to help you decide whether such an investment would be a good one for you."



## If a Giant Cut the Wires

Suppose all telephones were silent, and that for forty-eight hours you could not even call a telephone exchange anywhere in the Bell System to ask what the trouble was!

Imagine the confusion which would prevail—with personal visits and messengers substituted for direct, instant communication; with sidewalks, street cars and elevators jammed; with every old-fashioned means of communication pressed into service and all of them combined unable to carry the load.

The instant contact of merchant with customer, of physician with patient, of friend with friend, would be severed; the business man and the housewife would lose the minutes and hours the telephone saves them. The economic loss would be incalculable.

There would not be time enough to do the things we are accustomed to do, and social as well as business life would be paralyzed.

Such a condition is almost inconceivable. The Bell System has developed telephone service to the highest degree of usefulness and made it so reliable that its availability is never questioned. It has connected cities, towns and the remotest places from coast to coast, and has taught the people the advantages of nation-wide telephone facilities.

Plans are made, buildings built and businesses run with Bell Service taken for granted, and yet we have to imagine what it would mean to be entirely without telephones before the great value of this ever-present service can really be appreciated.

## AMERICAN TELEPHONE AND TELEGRAPH COMPANY AND ASSOCIATED COMPANIES

One Policy      One System      Universal Service

American and European Plans

Open All the Year Around

### DE SOTO HOTEL TAMPA, FLORIDA

New, Spacious and Airy. All Modern Conveniences. Two Blocks from the Business Centre. Suites of Any Size on Short Notice.

WRITE OR WIRE FOR RESERVATIONS

W. L. PARKER, Manager

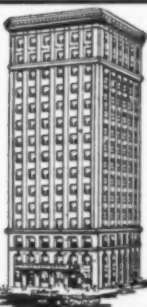
Western Union Office in Lobby

### THE HAMMOND HOTELS THE HOTEL ESSEX Opposite South Terminal Station BOSTON, MASS.

European Plan.  
Rates Moderate.  
Absolutely Fireproof

Free Transfer Baggage from and to Station.  
Terminal of Trains from South and West.

DAVID REED, Manager



### HOTEL WINECOFF ATLANTA'S Newest and Most Complete Hotel

Absolutely Fireproof      EUROPEAN PLAN  
200 ROOMS—Each with Individual Bath.

RATES—\$1.50 and \$2.00 Per Day

WINECOFF OPERATING CO., Inc.

ROBT. R. MEYER, President

P. C. STEELE, Manager

ATLANTA, GA.

# Classified Opportunities

## MINERAL AND TIMBER LANDS WATER POWERS MISCELLANEOUS PROPERTIES

### FOR SALE ON REASONABLE TERMS.

25,000 acres, Escambia county, Alabama, especially adapted for colonizing.

24,000 acres coal and timber lands, located west of Birmingham, Alabama.

14,000 acres, located Southern Alabama, especially desirable for agricultural purposes or colonizing.

10,000 acres, located north Baldwin county, Alabama, especially adapted for citrus-fruit growing, including a townsite located just across the bay from Mobile.

5000 acres of hardwood timber, located on the Alabama River not far from Mobile.

500 acres, suitable for factory sites and subdividing, in Mobile.

100,000,000 feet of hardwood timber, located in Central Alabama.

30,000,000 feet long-leaf yellow pine, Southern Alabama.

I own and control all of the above-described properties, and I also act as a broker, so that I am in a position to meet most any requirements in Southern acreage property. Address H. H. Wefel, Jr., Mobile, Ala.

WE HAVE SOME LAND suitable for steam shovel work, also land for deep mining. Would lease or sell. Miller Bros., Mulberry, Kans.

ATTENTION—MINERAL LANDS.—Zinc, lead and coal acreage; location, coal, 60,000, Southern Illinois; zinc and lead, Missouri and Arkansas, 4000 acres; can show you ledges of the real product; located near R. R. Have the above propositions from first party. Takes money to talk; no hot air. Very cheap. S. J. Burkitt, Moweaqua, Ill.

HAVE YOU A VALUABLE PROPERTY FOR SALE? Farm, timber land, mineral property or any other? We can help you get in touch with possible purchasers by an advertisement in these columns. For rates see head of this department.

### COAL MINE

FOR SALE—Valuable coal-mining property within three miles of a city of 25,000 population, electric railway connection; big tonnage in the city; freight rate, 25c. per ton; 400 acres of rights; 57 acres in fee; houses for 15 families; top equipment can take care of 500 tons per day. Will sell for one-half the price paid for the property five years ago. Mine now in operation. T. A. Pedley, Receiver, Owensboro, Ky.

### COAL LAND

2000 ACRES of Coal Lands for sale on head of Kentucky River, the Big Elkhorn. Seum of coal six to nine feet thick. Also 2000 acres near head of Rockhouse Creek; same county; same coal; four to six feet. Address J. H. Frazier, Whitesburg, Ky.

### COAL AND TIMBER LANDS

FOR SALE—912 acres coal and timber land in Harlan county, Kentucky, fronting on Louisville & Nashville Railroad; timber estimated by an expert at 5,000,000 feet; eleven seams of coal from 3½ to 8½ feet above water level; the 8½-ft. seam within 400 feet of railroad track. Would be glad to show property to any prospective purchaser. Address C. A. Vance, P. O. Box No. 144, Wise, Virginia.

### PHOSPHATE ROCK DEPOSITS

FOR SALE—Two million tons of blue rock phosphate in the ground near Mt. Pleasant, Tenn., running from 58 to 72 per cent. bone phosphate of lime; no potash required; simply grind the rock and apply to land; spur of the L. & N. R. runs through it. Capt. W. N. Hughes, U. S. A., 523½ Broadway, Nashville, Tenn.

### ZINC AND LEAD LANDS

FOR LEASE—120 acres near Yellville, Marion county, Arkansas; good wagon road; zinc shown up; fine strike recently adjoining lands; very favorable lease to responsible persons. Have developed zinc mines now in operation in Rush District at very favorable prices. Fredricks, Springdale, Ark.

RICH ZINC AND LEAD LANDS FOR SALE in Boone, Marion, Newton counties, Arkansas, and Tancy county, Missouri; 3584 acres selected 15 years ago in the richest mineral belt by competent prospector and experienced zinc miner. Address C. M. Fenton, Zinc, Arkansas.

### POLES AND PILING

FOR SALE—White cedar poles from twenty-five to sixty feet, with 6", 7" and 8" top. Walton & Nixon, Vilas, Fla.

### TIMBER

REAL TIMBER BARGAIN.—50,000,000 ft.; 70% N. C. pine, poplar and cypress, all original growth; on Southern R. R. in South Carolina. Liberal terms and low price. J. P. Mulherin (owner), Augusta, Ga.

SIX MILLION FEET of hardwood timber for sale in ten miles of Macon, Ga. Touches the Southern Railroad. Price \$2500. Address Box 393, Macon, Ga.

## RATES AND CONDITIONS

Rate 20 cents per line per insertion. Minimum space accepted, four lines. Maximum space accepted, 25 lines. In estimating the cost, allow seven words of ordinary length to a line. When the advertisement contains a number of long words, proper allowance should be made. Terms: Invariably cash with order; check, postoffice or express order or stamps accepted. No display type used. Questionable or undesirable advertisements will not be accepted. The assistance of our readers in excluding undesirable advertisements is requested. We reserve the right to refuse any advertisement. No patent medicine, whiskey or mining stock advertisements accepted. Rate for special contracts covering space used as desired within one year as follows: 100 lines, 15c. per line; 300 lines, 16c. per line; 500 lines or more, 15c. per line.

SOME excellent Southern hardwood timber limits. They are all bargains and will stand strictest investigation. Write me what you want. L. N., P. O. Box 596, Buffalo, N. Y.

FOR SALE—Cutting rights over 180,000 acres of easily worked, accessible forest land; 60,000 acres heavily timbered, and 40,000 acres very heavily timbered, averaging over 35,000 super-feet to acre. A total of over 1,600,000,000 super-feet of first-class hard and soft woods. Inspection by expert cruisers is solicited. For further particulars apply to F. W. Frankland, Marguerite Place, Lake Charles, La.

FOR SALE—Four Million feet of Sweet Gum Timber on Virginian R. R. near Seabell, Va. Will run 5 logs to M ft.; good logging; \$1.50 per M ft.; 10 years to cut. J. S. Lawrence, Murfreesboro, N. C.

### TIMBER LAND

FOR SALE—8000 acres of virgin timber, estimated by expert to cut forty million feet merchantable lumber, mostly oak, six miles from railroad. This is an exceptionally fine tract of timber; never had an ax in it. Price \$22 per acre, land and timber. Richardson & Martin, Tullahoma, Tenn.

FOR SALE—Several desirable pieces of timber at bargain prices. If you are in the market and want a money-maker, write George J. Philip, Box 42, Oil City, Pa.

### FARM AND TIMBER LANDS

WRITE FOR OUR new booklet containing Virginia farms, large and small, and timber investments. Virginian-Seaboard Realty Co., Albemarle, Va.

## FRUIT, FARM AND TRUCK LANDS

THESE COLUMNS ARE CLOSELY READ BY PEOPLE for information of all kinds about Southern properties of every description. If you have a property of any kind that you want to dispose of, try an advertisement in these columns. Others have to their advantage. For rates see head of department.

### ARKANSAS

BUY A FARM from the Farmers' Union Club around Sitka, Ark., 6 miles from Willford, 115 miles from Memphis, Tenn. R. L. Higginbottom, Manager, Sitka, Ark.

FOR SALE—By owner, 460 acres gently rolling upland; convenient and healthy location; 3 sets improvements; fine water; will divide; also other land, R. P. Rowley, Carlisle, Ark.

### FLORIDA

FREE—William L. Larkin's booklet, "The Truth About Florida," with a six-months' subscription (including one-half regular rates) to The Indian River Farmer. Fruit growers, truckers, general farmers, folks interested in Florida, send 25c. to The Indian River Farmer, V-1, Vero, Fla.

TEN THOUSAND ACRES best farm and fruit land in Polk county, Florida; on railroad within five miles Lakeland. Price, ten dollars per acre. Address G. C. Rogan, 1 and 2 Deen-Bryant Bldg., Lakeland, Fla.

ORANGE AND GRAPEFRUIT GROVES FOR SALE—I have three 20-acre groves for sale. 10-year-old bearing trees; all with beautiful Lake Fronts, on hard-surfaced roads, near railroad station, in the Lake Region of Polk County. Dividend-paying properties. The present crop is included. Now is the time to buy. Particulars, prices and terms on request. All bargains. John L. Albritton, Bartow, Fla.

CHOICE citrus and truck lands for sale in the Manatee River section of Manatee County, Florida; also water fronts. Send for soil survey report and views. Manatee River Land Co., Inc., 101½ Franklin St., Tampa, Fla.

FLORIDA.—8000 acres cut-over land lying between Lake Crescent, Lake Louise and Lake George, in Putnam and Volusia counties, traversed by main line of A. C. L. Railway; large portion especially adapted to orange and grapefruit culture; balance finest potato and general farming land; lands all around selling \$20 to \$100 per acre. My price, \$10 per acre in a body; terms. Correspondence solicited. Chas. A. Brown, Jr., 30-31 Buckman Building, Jacksonville, Fla.

FLORIDA.—Wanted—Names and address of every person contemplating moving to Florida. Wm. Johnson, Lake Butler, Fla.

FOR SALE—17,000 acres of farming and fruit land; near Tampa; timber will cut 2000 feet to acre. Price \$10 an acre. Terms. Address J. F. Stebbins, Zephyrhills, Fla.

### GEORGIA

765 ACRES good farming land at Harris Neck on Gould River, McIntosh county; 200 acres under cultivation; fine artesian well; 8-room house and outbuildings. H. Sanford Haupt, Savannah, Ga.

FARMS FOR SALE—Southwest Georgia farms; wonderfully fertile; 10 acres up; \$10 up. Also stock farms. Open grazing entire year. Farmers' Land Loan & Title Co., Albany, Ga.

A 50-ACRE PECAN GROVE for sale; 1000 budded trees of very best paper-shell varieties, one year old; situated in heart of pecan belt, just two miles from Albany, Ga. These will bear in four years. Will sell all or one-half for one-half of real value. For further information address Lock Box 526, Asheville, N. C.

### LOUISIANA

FOR SALE—Paper-shell pecan orchard; 45½ acres; best grafted varieties, coming into bearing; in the famous Louisiana alluvial section; half mile from depot; on public road. Price right. Reasonable terms. Write owner, J. T. McKinnon, Siloam Springs, Ark.

### VIRGINIA

COME TO VIRGINIA.—To close an estate, will offer for sale September 1, 1915, splendid farm of 240 acres, with magnificent bearing orchard of 800 Albemarle pippin and wine-sap trees, located in heart of Albemarle pippin district; elegant mansion-house and all necessary equipment.

Also an orchard of 3000 Albemarle pippin and wine-sap in full bearing.

For full particulars address J. L. Goodloe, Administrator, Onan, Nelson County, Va.

VIRGINIA ESTATES.—Colonial homes, plantations, farms, suburban homes, Albemarle pippin orchards, timber lands. Write us for what you want. We have it. R. N. Flanagan & Co., Charlottesville, Va.

IN THE VALLEY OF VIRGINIA.—Come to Augusta county, the wealthiest and most progressive in the State. The home of the red apple. Blue grass stock farms and orchards my specialty. J. F. Tannehill, Staunton, Va.

FOR SALE—Finely-located farm, 236 acres, equipment, stock, crops, on macadam road, right at Culpeper, Va.; best location in this section; town water privileges free; good land, completely fenced, healthy, fine views, elegant shaded lawn. Full descriptive cut on application. No agents, no trades. Address Owner, Box 297, Culpeper, Va.

## RESIDENCE FOR SALE

FOR SALE—Two-story brick residence; ten rooms, large yard, fruit trees, chicken houses, coal houses; all in fine condition, located in good resident section of Mobile, Ala.; walking distance from Postoffice, on car line convenient any part city. Must divide an estate. L. N., Box 673, Mobile, Ala.

## INTEREST IN COAL MINING COMPANY FOR SALE

VALUABLE INTEREST in one of the best coal works in the Pocahontas field. The unprecedented large increase in the export business will make this stock worth several times the price asked for it. Works are operating every day. Address "Fairmount," 57 Fairmount Ave., Jamestown, N. Y.

## BUSINESS OPPORTUNITIES

FOR SALE—An established business at a bargain; owner has good reasons for selling; money coming in daily. J. F. Stebbins, Zephyrhills, Fla.

WANTED—Plantations, timber, coal and mineral lands, manufacturing, business and investment properties, city and country, in exchange for other properties; have constant demand, also some cash buyers. Send full details. Arthur M. Connor, Oxford Bldg., Washington, D. C.

\$75 CLEARED \$112.50 in three months selling adjustable form units for building concrete culverts. You can do the same. Write before someone else gets your territory and find out how it was done. Frick Manufacturing Company, Fricks, Pa.

HAVE \$1500 for business opportunity; would buy whole or half of small manufacturing business. D. C. Davis, 239 Fourth Ave., New York City.

BEST YET; nothing like it on market; every lady wants it; great profit; fortune selling this by mail; will sell copyright or royalty; reason, other business. Free particulars. Clark Downey, West Point, Ga.

WANTED—A practical soap maker who desires to go in business for himself; must have \$5000 in cash to invest. For full particulars address Chas. J. Ackrill, P. O. Box 1025, Tampa, Fla.

FOR SALE IN SHREVEPORT, LA., best town in the South, one-half interest in large retail hardware, crockery, glassware store; will take about \$25,000 to \$30,000 to swing deal; 40,000 population and growing rapidly; will be 100,000 in 10 years; 12 R. R. and Red River; low in freights; center of one of the largest oil and gas fields in the world. Business can be run up to \$150,000 per year at a 30 per cent. gross profit. Expenses can be kept around \$20,000. Address E. H. Vorderbaumen, Shreveport, La.

FOR SALE—Sporting goods and repair business; best town North Texas; good reason for selling; about \$2500 outfit; would consider some trade. E. M. Winfrey, Wichita Falls, Tex.

YOUR ideas may bring you wealth if patented through credit system. Send sketch. Free search. Book free. Waters & Co., 530 Warder Bldg., Washington, D. C.

MANUFACTURING PLANT using lumber and veneer wishes a location in which additional capital can be obtained; can use partner with services. Address No. 280, care Manufacturers Record, Balto., Md.

FACTORY TO BUILD.—We are promoting a factory for automobile parts to be located in our city, and would like to connect with anyone interested in the promotion or operation. Nethery & Co., Austin, Texas.

WANTED—Manufacturer of ability to join in making stock sizes short-leaf yellow pine doors and sash. Jobbing connection will take greater part of output. Address No. 1798, care Manufacturers Record, Balto., Md.

WANTED—\$25,000 for making changes in our plant to make paving and face brick from the best deposits of shale in a radius of 200 miles; no local competition; good position to interested party. Address No. 1798, care Manufacturers Record, Baltimore, Md.

MANUFACTURING PLANT wishes a location in which additional capital can be obtained. Can use partner with services. Address No. 1800, care Manufacturers Record, Baltimore, Md.

\$40,000 STOCK now subscribed by property owners along proposed 18-mile trolley line, costing \$125,000, through mineral, fire clay and timber land, connecting with the Pennsylvania Railroad. Wanted capitalist to finance balance. Extraordinary profits on options along trolley. W. E. Russell & Co., Inc., Altoona, Pa.

## AUTOMOBILE ELECTRO-INDICATOR

AUTOMOBILE ELECTRO INDICATOR, automatic, gasoline, oil, water, temperature; one dial. N. J. Nessa, M.D., Sioux Falls, S. D.

## CAPITAL WANTED

A GOING Florida colonization company, having net assets worth \$300,000 on a conservative valuation, needs capital to develop and market one of the best tracts of land in the State. This is not a get-rich-quick scheme, but an unusually sound business proposition. Want to hear from investor or broker who can handle a high-grade bond issue or cumulative preferred stock. Strict investigation invited. For particulars address B. H. Wilson, New Smyrna, Fla.

## REPORTS AND INVESTIGATIONS

ACCURATE political, financial or miscellaneous reports and intelligent investigations of any character in Birmingham, Alabama, and surrounding towns. The performance of your commissions solicited. References. P. O. Box 597, Birmingham, Ala.



coal and  
ness and  
ntry, to  
ve con-  
s. Good  
Oxford

the sell-  
ing con-  
o. Write  
ory and  
manufac-

portunity:  
manufac-  
Fourth

market:  
fortune  
right or  
ree par-  
Ga.

er who  
f: must  
ull par-  
O. Bur

A., best  
in large  
e store;  
o swing  
rapidly,  
and Red  
e of the  
i. Busi-  
near at a  
can be  
Vorden-

repair  
ood res-  
would  
Winfrey,

h if pat-  
sketch  
Co., 228

lumber  
ch addi-  
can use  
to. 190  
Md.

omoting  
located  
respond  
tation or  
exas.

to John  
yellow  
nnection  
ress No.  
to, Md.

anges in  
e brick  
a radium  
good pe-  
No. 174  
ore, Md.

as a lo-  
can be  
services.  
Record.

property  
ey lim,  
ire clay  
e Penn-  
alist to  
ofits on  
l & Co.

CATOR

CATOR.  
erature  
x Falls

ompany,  
a con-  
develop  
of land  
ch-quick  
business  
restor or  
de bond  
Strict  
lars ad-  
ia.

IONS

misc-  
investig-  
mm, Ala-  
the per-  
collected  
am, Ala